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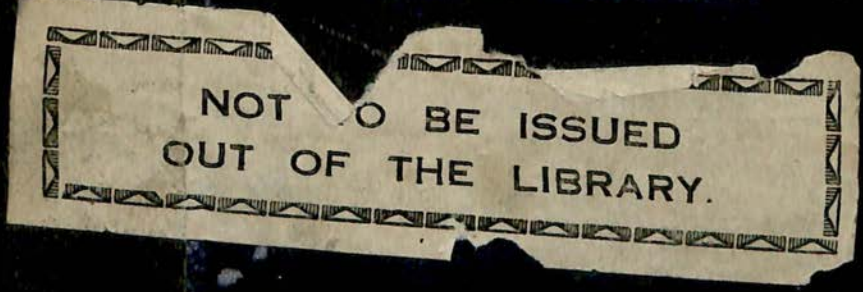
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FIVE WEEKS IN A BALLOON.

A VOYAGE OF EXPLORATION AND DISCOVERY IN CENTRAL AFRICA.

FROM THE FRENCH OF JULES VERNE.

WITH SIXTY-FOUR ILLUSTRATIONS BY RIOU.

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FIVE WEEKS IN A BALLOON.

CHAPTER I.

Dr. Samuel Fergusson; his projected Journey; how to accomplish it.—Dick Kennedy; his attempts at Dissuasion; their Failure.

THERE have been disputes as to the originator of the great idea of traversing the African continent, in a manner to be independent of its multitudinous and deadly obstructions; but the subjoined narrative will, we cannot doubt, be sufficient to assure the reader that the man who undertook, and in the face of unexampled difficulties carried out, the project, conceived it, and stands indebted to no one for the honours now accumulating on the name of Dr. Samuel Fergusson.

Among men of science, the claims of any other than Fergusson to this invention of a method of, as it were, laying bare the bosom of a mighty continent at one blow, would be received with ridicule. In him, as in many of the most adventurous minds in Europe, it had become an established belief that the secret recesses of Africa were to be attained by persistent energy. But he saw at the same time

that the most resolute efforts, with heroism to back them, accomplished, to his mind, insufficient results. The scheme of the previous expeditions could barely grapple with the enormous natural obstacles in the paths of the intrepid wanderers. Everything that men and heroes could do had been done, and yet the tracks of civilised steps were but threads running through those vast and barbarous deserts. Speculating on the three separate ways which had been opened by his illustrious predecessors—that of Barth, who, following the route traced by Denham and Clapperton, penetrated to the Soudan; of Livingstone, who has pushed from the Cape of Good Hope to the basin of the Zambesi, and other parts as yet unknown; and of Burton and Speke, to whom is due the discovery of the immense interior lakes—he felt that Africa was still a mystery. Man's physical strength, devotion, and courage seemed not enough for the giant task. With the irradiation of the light of Genius, he called on Science to aid him.

Hitherto it had been incumbent on all explorers to bribe, menace, and cajole, sometimes, at the imminent risk of their lives, to use arms against the savage inhabitants. Dr. Fergusson's design was to evade them. It had aforetime been a work of years to cross a patch and skirt of this continent. He meant to survey Africa in the course of a few leisure weeks. What was once a heavy,

weariful foot march, dependent for progress on the fidelity of native servants, he determined to perform lightly and airily, with a moderate supply of comforts, supported entirely by his scientific knowledge, based on deep and serious calculations, and his firmness of nerve, which he knew well that he could trust.

The dream of such a voyage has doubtless passed through other heads, and it has remained a dream; that is to say, it has passed *through* them, and left no mark upon the history of European enterprise. No sooner was the balloon invented than people began to talk of visiting the distant quarters of the globe as one of the ordinary expeditions of daily life. It was reserved for Dr. Samuel Fergusson to show what can actually be done with this hitherto intractable means of transit.

In short, he conceived the simple idea of taking a survey of the African continent in a balloon.

Dr. Fergusson was not an idealist, he was not a dreamer, and he was not mad, though his friends—especially the one whom he invited to accompany him—were at first inclined to make him a subject for the Commissioners of Lunacy when he expounded his design to them: he was a practical man. This will be seen and attested by the reader, as it has already been by the scientific world.

To the Doctor it was a voyage of pleasure,

sharpened by the keen exercise of his intelligence, and the development of laborious premeditations. So little did he doubt its being likewise a voyage of comparative safety, that he invited—partly, it may be confessed, compelled—his intimate and dearest friend to join him in the adventure of five weeks, as though it were a tour in Switzerland.

The friend in question was Richard Kennedy, his old comrade in arms, Dick, formerly of the famous Cameronians, and as noticeable a specimen of the Black Watch in its pride as you would wish to see.

The Doctor himself was a man of middle size, of a composed aspect, with regular features, a forcible nose strongly suggestive of determination and pursuit of his game, and peculiarly soft eyes, more meditative than daring. His bearing was on most occasions grave, while a strong bloom of animal health suffused his cheeks. Remarkably long arms, and a firm grip of the earth in walking, characterised the accomplished pedestrian, used to rely on his own exertions.

His friend Dick was a Scotchman in every sense of the word, open and candid, resolute, and a trifle obstinate. He was a great fisherman, and a mighty hunter, nothing very surprising in a native of the Highlands of Scotland; and so wonderful a shot was he reputed, that it was said that not only could he hit with his rifle-ball the blade of a knife, but could hit it so accurately,

that the bullet, when afterwards weighed, would be found in equal halves.

Kennedy's appearance recalled that of Halbert Glendining, as described by Sir Walter Scott in "The Monastery;" in height he exceeded six feet, and his figure, though full of ease and grace, was also gifted with Herculean strength; his face was sunburnt to a deep reddish-brown, and from it looked out two bright black eyes, which indicated the strong natural courage which he possessed; in short, there was something so frank and pleasing in the whole aspect of the Scotchman, that everyone felt at once impressed in his favour.

Our two friends had become acquainted in India, at a time when both belonged to the same regiment; and when Dick was hunting tigers and elephants, Samuel was collecting plants and insects. Each was clever in his own way, and more than one rare plant became the property of the Doctor, who used to say to Dick that he valued it more than his acquisition of ivory tusks.

Although these two young men had no opportunity of saving each other's life, or, indeed, of rendering each other any remarkable service, yet they became close and attached friends. It was their fate to be often separated, but a warm sympathy invariably brought them again together.

Since their return to England, the distant expeditions of the Doctor had often placed seas and continents between them; but on his return from

his wanderings, he had never failed to go, not to ask for, but to give some weeks of his company to his Scotch friend.

Dick talked of the past; Samuel prepared for the future; the one looked forward, the other backwards; thus Fergusson was restless, and always desiring to be moving, whilst Kennedy took everything with the most perfect quietness and placidity.

After his return from a long absence in Thibet, the Doctor remained quiet for nearly two years, without saying a word about new explorations, and Dick had come to believe that his instincts of travel and appetite for adventures had ceased. This greatly pleased Kennedy.

"This sort of thing," thought he, "must have ended badly one day or other. However much used a fellow may be to all sorts of strange people, one can't travel with impunity for ever among anthropophagi and wild beasts."

So Kennedy made up his mind that the Doctor had settled down, having done quite sufficient in the cause of science, and much to earn the gratitude of the human race.

On the Doctor's last visit, however, Dick had noticed that his friend had become thoughtful, and gave himself up to secret calculations, passing whole nights working at figures, and even making experiments with singular-looking engines of which no one could make anything. It was clear

that some great thought was fermenting in his brain.

"What on earth can he be ruminating about?" thought Kennedy, as he bade his friend good-bye on leaving Scotland on his return to London.

A day or two after, a London newspaper answered his question. It contained a notice of the Doctor's intention to cross the African continent in a balloon; he had even made his intention the subject of a paper he had read before the Royal Geographical Society, and so pleased was that august body with his proposal, that it had at once voted him a sum of money towards defraying the expenses of the projected voyage.

"This intrepid discoverer, Dr. Samuel Fergusson," read Dick, "proposes to cross Africa, from east to west, in a balloon. If we are properly informed, the point of departure on this surprising voyage will be the island of Zanzibar, on the eastern coast of the continent; as to the place at which he will arrive on the completion of his voyage, that can be known to Providence alone."

"The unlucky wretch!" cried Dick. "The fool! the madman! To cross Africa in a balloon! This only was wanting! This is what has been running in his head for the last two years!"

Wherever there is a note of exclamation you can imagine Dick giving his head a hard blow with his fist, and you will have some idea of the

exercise in which he indulged whilst ejaculating these words.

Seeing how much the news affected him, his old housekeeper tried to insinuate that it might very well be a mystification.

"Nonsense! Don't I know my man? Isn't it himself all over? To travel through the air! He seems to have become jealous of the eagles! No, certainly this must not be permitted. I must go and put a stop to this. If he is left to himself, he'll start some fine day for the moon!"

That night Dick started for London, and next day saw him at the Doctor's house, where he sprang up the steps, and announced his arrival by a volley of blows with the knocker.

Fergusson opened the door himself.

"Dick!" said he, without any great astonishment.

"Dick himself," replied Kennedy.

"Why, my dear Dick, what are you doing in London—and during the hunting season?"

"To put a stop to a piece of nameless folly."

"A folly?" cried the Doctor.

"Is this true which I read in the paper?" said Dick, holding out a copy.

"Perfectly true; in fact, I was about to write to you. I mean to take you with me."

"Take me!" cried Dick, giving a bound worthy of a chamois. "Do you want both of us to be locked up in Colney Hatch?"

"Not at all. I am quite serious, and if you won't go with me I shall go alone."

The Doctor was deaf to all his friend's arguments, serious or otherwise; his mind was made up. Dick was, however, determined by all possible means to oppose his friend's departure. Meanwhile he kept his own counsel, and contented himself with keeping his eyes on the Doctor. As for Fergusson, he went on quietly looking after his preparations.

CHAPTER II.

The Doctor decides on a Starting-point.—The Balloon; its Capacity.—Balloon within Balloon; their Construction.—The Car; its Contents.—Joe.

DR. FERGUSSON had not chosen by chance the aerial line he reckoned on following; his point of departure had been seriously studied, and it was not without good reasons that he had decided to make his ascent from the island of Zanzibar.

This island, situated close to the eastern coast of Africa, is in 6° of southern latitude, that is to say, 430 geographical miles below the equator; and we shall see hereafter that the Doctor knew very well what he was about.

He had been for a long time occupied with the details of his expedition. The balloon, above all, this marvellous vehicle which was to transport him through the air, was the object of his constant solicitude.

First of all, in order that the dimensions of the balloon should not be too great or unwieldy, he resolved to inflate it with hydrogen gas, which is fourteen and a half times lighter than air. The

production of this gas is easy, and it has always given the most satisfactory results in all aerostatic experiences.

The Doctor, after the most exact calculations, found that, for the indispensable objects of his voyage and for his apparatus, it would be necessary to carry a weight of 4,000 lbs., and he had therefore to find out what would be the buoyancy capable of lifting this weight, and consequently what would be the capacity required.

A weight of 4,000 lbs. is represented by a displacement of the air of 44,847 cubic feet, which is as much as to say that 44,847 cubic feet of air weigh about 4,000 lbs. In giving the balloon, then, this capacity of 44,847 cubic feet, and in filling it, in place of air, with hydrogen gas, which, fourteen and a half times lighter, only weighs 276 lbs., there results a difference of 3,724 lbs. It is this difference between the weight of the gas contained in the balloon and the weight of the surrounding air, which constitutes the ascending force of the balloon.

If there were introduced into the balloon the 44,847 feet of gas of which we have been speaking, it would be entirely filled; but this must never be done, for as the balloon ascends into the less dense strata of the atmosphere, the enclosed gas has a tendency to expand, and would very soon burst its envelope. Consequently, balloons are generally filled two-thirds full. But the Doctor, in conse-

quence of a certain project known only to himself, resolved to fill his balloon only half, and, although he would have to carry 44,847 cubic feet of hydrogen, to give his balloon a capacity of very nearly double. He made it of that elongated form which is known to be preferable; the horizontal diameter was fifty feet, and the vertical diameter seventy-five; he obtained thus a spheroid whose capacity in round numbers we may call 90,000 cubic feet.

If Dr. Fergusson had been able to employ two balloons, his chances of success would have been increased, for in case one should get torn or burst in the air, he could, at all events, by throwing out ballast, keep himself up by the other. But the management of two balloons would become very difficult, when he would have to act so as to keep an equal buoyancy with each.

After long reflection, Fergusson, by an ingenious contrivance, united the advantages of two balloons without the inconveniences; he constructed two of different sizes, and enclosed the one in the other. His outside balloon he kept of the size we have given above, and in it was the lesser one, of the same shape, but which was only forty-five feet in horizontal diameter, and sixty-eight feet vertical. The capacity, therefore, of this interior balloon was only 67,000 cubic feet; it could float in the fluid which surrounded it, and a valve was contrived which could, in case of need, be used to make a communication between the two balloons.

This arrangement presented this advantage, that if he wanted to let out the gas in order to descend, he could let it escape first from the large balloon; even if he entirely emptied it, the little one would remain intact. He could then get rid of the exterior envelope as a troublesome weight; and the little balloon left alone would not offer to the wind the resistance which half-inflated balloons do. Besides, in case of accident, if the exterior balloon should be torn, the other would have the advantage of being preserved.

These two balloons were made of twilled Lyons silk, coated with gutta-percha. This resinous gum is absolutely impermeable; it is entirely unaffected by acids or by gas. The silk was doubled over the entire upper half of the balloon, where the strain would be most felt. This envelope could keep in the fluid for an unlimited time. Nine square feet of it weighed half a pound; but as there were about 11,600 square feet of surface in the material of the exterior balloon, its weight was 650 lbs.

The covering of the second balloon, having 9,200 square feet of surface, only weighed 510 lbs. Thus, both together weighed 1,160 lbs.

The net by which the car was to be suspended, was made of the very best manufactured hemp rope. The two valves also were the objects of as minute care as would have been the helm of a ship.

The car, of a circular shape, and in diameter of fifteen feet, was made of wickerwork, strengthened by a light armature of iron, and lined in the lower part with elastic springs intended to weaken the shocks; its weight and that of the net did not exceed 280 lbs.

The Doctor also had constructed four iron chests or boxes, two lines thick. They were all joined together by pipes furnished with stop-cocks; and he joined to them a serpentine tube of about two inches in diameter, which ended in two straight branches of unequal length, but of which the longer was twenty-five feet high, and the shorter only fifteen. These chests of sheet-iron were fitted into the car so as to occupy the least possible space; the serpentine tube, which it was not necessary to adjust till a later period, was packed separately, as well as an extremely powerful electrical battery by Bunsen. This apparatus had been so ingeniously put together that it did not weigh more than 700 lbs., although this included twenty-five gallons of water contained in a special receptacle.

The instruments intended for the voyage consisted of two barometers, two thermometers, two compasses, a sextant, two chronometers, an artificial horizon, and an altazimuth for raising distant or inaccessible objects. The resources of the Observatory at Greenwich were placed at the Doctor's disposal. It was not his intention, how-

ever, to make any physical experiments or observations; he intended only to observe his direction, and to determine the position of the principal rivers, mountains, and towns.

He provided himself also with three well-tested iron anchors, as well as with a light but strong silken ladder fifty feet in length.

He calculated likewise the exact weight of his provisions; they consisted of tea, coffee, biscuits, salt meat, and pemmican, a substance which contains in a small space a great deal of nutriment. Independently of a sufficient supply of brandy, he contrived two water-tanks, holding each twenty-two gallons. As the eatables and drinkables were consumed, so would be lessened, little by little, the weight lifted by the balloon; for it must be borne in mind that the equilibrium of a balloon in the atmosphere is a very delicate affair—the loss of an almost insignificant weight suffices to produce a very appreciable difference.

The Doctor did not forget a tent, which could be made to cover over a part of the car, nor the coverings which composed all the bedding for the voyage, nor rifles, fowling-pieces, and a good supply of powder and balls.

He had had himself weighed, as well as Kennedy—who, however, still insisted that he would never accompany him on so mad an expedition as a balloon journey across a continent—and also his servant Joe, of whom we must say a word or two.

Joe had long been Fergusson's servant, and was, indeed, now looked upon more as a friend; his master had the utmost faith in him, and he amply repaid it by a devotedness to the Doctor that had no limits.

Joe was a perfect master of all trades—there was nothing the handy fellow could not do, and do well; so that when the project of the voyage across Africa was broached Joe took it as a matter of course; obstacles no longer existed, for had not the Doctor said he would do it? That was quite sufficient for Joe; and so, though his master never spoke about it, Joe very well knew he would accompany him on his aerial explorations.

Thus the Doctor made his calculations, and the following list shows how he made up the weight of 4,000 lbs.:—

	lbs.
Fergusson	135
Kennedy	153
Joe	120
Weight of first balloon	650
,, second balloon	510
Car and net	280
Anchors, instruments, guns, bedding, &c., tent, different utensils	190
Provisions, pemmican, biscuits, tea, coffee, brandy	386
Water	400
Apparatus	700
Weight of hydrogen gas	276
Ballast	200
Total	4,000

Such was the way in which the 4,000 lbs. were

made up, with which the Doctor proposed ascending. He took, as you will have seen, only 200 lbs. weight of ballast—"For unforeseen cases or accidents only," said he, for he reckoned that he would never have to use it, thanks to his apparatus.

CHAPTER III.

Preparations completed. — The *Resolute*. — Captain Pennet. — The Cargo.—Kennedy's Outfit.—The Farewell Dinner.—A Philosophical Discussion.—The Doctor's Plan of Aerial Navigation.

ABOUT the 10th of February preparations were nearly ended; both balloons, one within the other, were entirely finished. They had been subjected to a severe trial of air at an extreme pressure, but had come out of the trial with a success which bore witness to the care which had been taken in their construction.

On the 16th of February, the *Resolute*, a screw steamer of eight hundred tons burthen, a capital sea boat, came into the Thames and anchored off Greenwich. She was commanded by Captain Pennet, of the Royal Navy, and had been placed by government at the service of Dr. Fergusson through the interest of several influential members of the Royal Geographical Society. Pennet was particularly interested in this voyage of the Doctor's, as he had long known and valued him as a friend.

The hold of the *Resolute* had been specially arranged for the reception of the balloon; it was carefully transported there on the 18th of February,

and laid at the bottom in a manner so secure as to prevent any accident. The car and its accessories, the anchors, the ropes, the provisions, the water tanks, were all stowed away under Fergusson's own eyes.

Ten tons of sulphuric acid, and ten tons of old iron, were taken on board for the production of the hydrogen gas. That quantity was more than sufficient, but it was best to be prepared for any possible losses. The apparatus intended for the manufacture of the gas, consisting of thirty barrels, was put at the bottom of the hold. These different preparations were all completed by the evening of the 18th of February.

Two comfortable cabins were arranged for the Doctor and his friend Kennedy. The last still swore hard and fast that he would not go on any account; but the Doctor was not a bit surprised to see him come on board with a regular arsenal—two double-barrelled breech-loaders, and an excellent rifle, with which a thorough sportsman and good shot like Kennedy could lodge a ball at two thousand paces in the eye of a chamois; to these he added two six-barrelled Colt's revolvers, his powder flask and cartridge bag, as well as a supply of shot and bullets, but not exceeding in weight, the Doctor quietly remarked to himself, what he had all along expected his friend Dick to provide himself with. Joe also had comfortable quarters assigned to him.

The last arrangements made, and the last farewells spoken at a great dinner given to the Doctor by the Royal Geographical Society, all arrived safely on board; and on the morning of the 21st February, at five o'clock, the furnaces of the *Resolute* began to roar, her screw to work, and she to steam down the Thames, fairly on her voyage to Zanzibar.

Many were the conversations on board between the officers of the *Resolute* and the Doctor as to the success likely to attend his bold adventure, but he was never at a loss to meet all these discouraging remarks. One conversation, or rather a part of one, which the Doctor had with Captain Pennet we must report, as it contains what may be called the Doctor's secret—the use he was to make of the apparatus of which we gave a faint description in the preceding chapter.

The Doctor had just remarked that at different heights in the atmosphere there were different currents of air travelling different ways, and that in order to go in which direction you wished in a balloon, it was only necessary to find out a current whose direction suited you, and you could travel at your ease.

"Very true," said Captain Pennet; "but in order to reach these currents, you must constantly either ascend or descend. There is the true difficulty, my dear Doctor."

"And why, my dear Captain?"

"Let us understand what we are saying: it would only be a difficulty and an obstacle in case of long voyages, not in simple trips in a balloon."

"And your reason, if you please?"

"Because you can only ascend by throwing out your ballast, and you can only descend by losing your gas, and under such an arrangement as that, both your ballast and your gas would very soon be expended."

"My dear Pennet, there is the whole question. There is the only difficulty which science ought to attempt to conquer. It is of no use talking of directing a balloon, the great thing is to be able to bring it down from a height without losing any gas, which is its strength, its blood, its very soul, if I may so express myself."

"Quite right, my dear Doctor; but that difficulty has not yet been overcome, that means has not yet been found out."

"I beg your pardon, it *is* found!"

"By whom?"

"By me!"

"By you?"

"Understand thoroughly, that but for that I should never have risked crossing Africa in a balloon. At the end of twenty-four hours I should not have had any gas left!"

"But you never spoke of that in England?"

"No. I did not see the use of having it publicly discussed; that seemed useless to me. I have made

in secret preparatory experiments, and I have been satisfied; I have now no longer any need to learn more."

"Ah, well, my dear Fergusson, may one ask your secret?"

"Certainly, and my method is very simple. Over and over again it has been tried to rise or descend at will without losing the gas or ballast of a balloon. A French aeronaut, M. Meanier, thought he could achieve this by compressing air; a Belgian, Von Hecke, by means of wings, which would exert a material force, but which would have been insufficient in most cases. The practical results which have been obtained by such means have been altogether insignificant. I resolved then to attack the question differently. First of all, I do away altogether with the ballast, because it is only in very important cases, such as the breaking of any apparatus, or the necessity of ascending instantly to avoid some unforeseen obstacle, that I require it. My means of ascending or of descending consist solely in expanding or contracting, by different temperatures, the gas enclosed in the balloon; and this is how I obtain such a result:—You saw embarked with the car several cases, of which you do not know the use. Of these cases there are five. The first holds about twenty-five gallons of water, to which I add some drops of sulphuric acid, to increase its conductibility, and I decompose it by means of a powerful battery of Bunsen's. Water, as you know,

is composed of two parts of hydrogen gas and one of oxygen. This last, under the action of the battery, is delivered by the positive pole into a second case. A third, placed above that, and twice the size of it, receives the hydrogen, which comes into it by the negative pole. Stopcocks, of which one has an opening twice the size of the other, allow these two cases to communicate with a fourth, which is called the mixing case. There, in fact, these two gases proceeding from the decomposition of the water, mingle. This mixing case holds about forty-one cubic feet. At the upper part of this case is a platina pipe, furnished with a stop-cock. You already comprehend me. The apparatus which I describe to you is really a furnace, whose heat exceeds that of a forge. This settled, I pass to the second part of the apparatus. From the lower part of my balloon—which is hermetically closed—two separate pipes issue at a little distance apart. The one rises from the upper strata of hydrogen gas, the other from the lower. These two pipes are provided at short distances with strong articulations of india-rubber, by which they can lend themselves to the oscillations of the balloon. They both descend to the car, and are let into a case of iron of a cylindrical shape, which is called the heat case. It is closed at both its extremities with strong discs of the same metal. The pipe which comes from the lower part of the balloon is let into this cylindrical box by the bottom

disc; it enters there and takes the shape of a spiral, like the worm of a still, of which the rings, lying one on another, take up nearly the whole height of the case. Before coming out of it, the worm, as we shall call it, leads into a little cone, whose concave base, in the form of a spherical cap, is directed towards the bottom. It is by the summit of this cone that the second pipe issues, and leads, as I have said, into the upper layers of gas in the balloon. The spherical cap of the little cone is made of platina, in order not to melt under the action of the furnace; for that is placed under the bottom of the iron case in the middle of the worm, and the extremity of its flame just lightly licks this cap. You know what a stove is, used to warm rooms. You know how it acts. The air of the room is forced to pass through pipes, and is returned at a more elevated temperature; and what I have just described to you is just such a stove. And in fact what happens? The furnace once lighted, the hydrogen in the worm and the concave cone becomes heated, and rises rapidly by the pipe which leads to the upper regions of the balloon. A void is created below which attracts the gas from the lower regions of the balloon, which, in its turn, is heated and continually replaced; there is thus established in the pipes and the worm an extremely rapid current of gas, coming out of the balloon, returning there, and incessantly increasing in heat. But each degree of heat increases the volume of

gas $\frac{1}{1\,8\,0}$; if then I raise the temperature eighteen degrees, the hydrogen in the balloon will have expanded $\frac{1\,8}{1\,8\,0}$, or sixteen hundred and fourteen cubic feet; it will then displace sixteen hundred and seventy-four cubic feet more of air, which will increase its power of ascension by one hundred and sixty pounds. This obviates throwing out this weight of ballast. If I increase the temperature to a hundred and eighty degrees, the gas will be expanded to $\frac{1\,8\,0}{1\,8\,0}$; it will displace sixteen thousand seven hundred and forty cubic feet more, and its ascending force will have increased by sixteen hundred pounds. You can understand, then, that I can obtain very considerable changes in equilibrium. The capacity of the balloon has been calculated in such a fashion, that being half inflated it displaces a weight of air exactly equal to that of the envelope of the hydrogen gas and of the car carrying the travellers, and all their belongings. In this state of inflation it is in exact equilibrium with the air, and neither mounts aloft nor descends. To ascend I raise the temperature of the gas higher than that of the surrounding air by means of my furnace. By this increase of heat is obtained a greater tension, and the balloon is more inflated and mounts higher the more I expand the hydrogen. The descent is naturally made by moderating the heat of the furnace, and allowing the temperature to cool. The ascent, therefore, will be much more rapid than the descent. But this is a very

fortunate circumstance: I have never any object in descending rapidly; on the contrary, it is by an exceedingly prompt ascent that I avoid all obstacles. The dangers I dread are not to be met with above, but below. Besides, as I told you, I have a certain quantity of ballast, which will allow me to rise still more quickly should that be necessary. My valve, placed at the upper pole of the balloon, is no more than a safety-valve. The balloon always retains the same charge or quantity of hydrogen; the variations which I produce in the temperature of this imprisoned gas alone provide for all the movements of ascending or descending. However, as a bit of practical detail I will add this:—The combustion of the hydrogen and the oxygen in the furnace produces only steam; I have therefore furnished the lower part of the cylindrical iron case with a relief pipe, having a valve which acts at less than two pressures of the atmosphere; consequently, as soon as that pressure is reached the steam escapes of itself. Observe how exact my figures are:—Twenty-five gallons of water decomposed into its constituent elements give two hundred pounds of oxygen and twenty-five pounds of hydrogen. This represents, at the pressure of the atmosphere, eighteen hundred and ninety cubic feet of the first, and three thousand seven hundred and eighty cubic feet of the second; in all, five thousand six hundred and seventy cubic feet of the mixture. But the stopcock of my fur-

nace, fully open, allows twenty-seven cubic feet an hour to pass, with a flame at least six times stronger than that of an ordinary gas-light. It follows, then, that to keep myself at no very great height I should not burn more than nine cubic feet an hour. My twenty-five gallons of water therefore represent six hundred and thirty hours of aerial navigation, or a little more than twenty-six days. But as I can descend when I like, and renew my stock of water on my way, my voyage might be prolonged indefinitely. Such is my secret; it is simple, and like all simple things, it cannot fail to succeed. The expansion and contraction of the gas in the balloon—such is my plan, which neither demands troublesome wings nor mechanical appliances. A furnace to produce any changes of temperature, and a case in which to heat the gas, neither takes up much room nor is heavy. I believe, then, that I have united every necessary condition successfully."

* * * * *

"After all," said the Captain, "it may be dangerous."

"What matters," said the Doctor, quietly, "if it is practicable?"

CHAPTER IV.

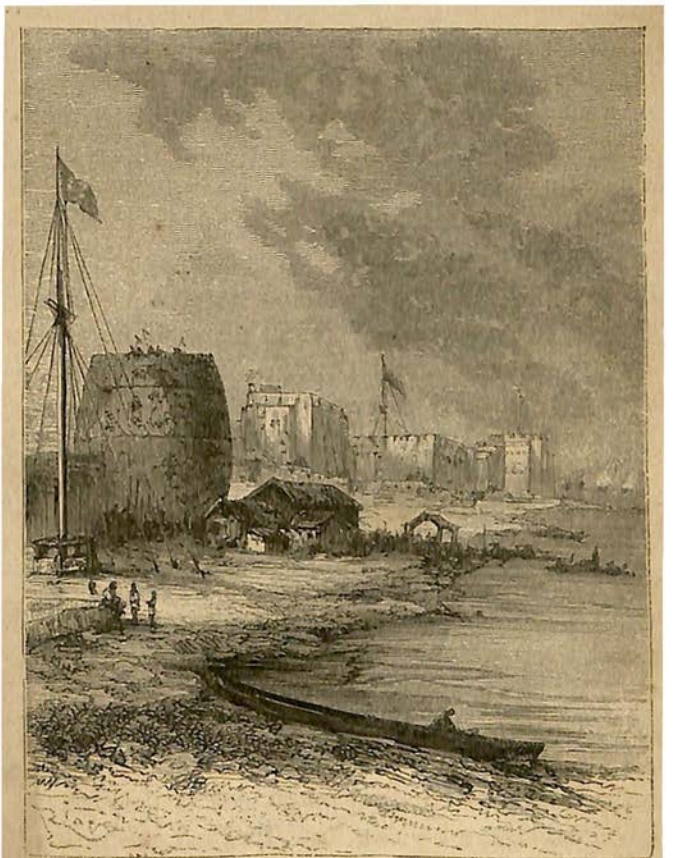
Arrival at Zanzibar.—The English Consul.—Ill-will of the Inhabitants.—The Island of Koumbeni.—The Rain-makers.—Inflation of the Balloon.—The Start on the 18th April.—The last Farewell.—The Victoria.

FAVOURABLE winds speeded the *Resolute* to her destination; the Mozambique Channel was safely passed, and at eleven o'clock on the morning of the 15th of April the anchor was let go in the port of Zanzibar.

The island of Zanzibar belongs to the Iman of Muscat, and is certainly the most beautiful of his possessions. Great numbers of ships from all the neighbouring countries visit it. The island is separated from the African coast by a channel, nowhere more than thirty miles wide. A large trade is done in gums, ivory, and above all in ebony, for Zanzibar is the great slave market; here come all the prisoners taken in the battles which the chiefs in the interior constantly wage.

The anchor had not long touched the ground when the English consul came on board to render all the assistance in his power to Dr. Fergusson, and soon, with Kennedy and the faithful Joe, he was comfortably installed in the Consul's house.

Here he heard of the terrible sufferings from hunger and bad weather which Speke had under-



View of Zanzibar.

gone with his companions, in their attempt to reach the country of Ugogo.

"There, Dick," said the Doctor, "think of all those perils and privations which we know how to avoid."

The first intention was to land the balloon on the shore at Zanzibar, and to inflate it near a flag-staff where it would have been sheltered from the east winds by an enormous tower. This tower was like nothing so much as an enormous cask placed on its end, but beside which the famous tun of Heidelberg would have been dwarfed to a little barrel. It answered the purpose of a fort, and on a platform on the top some lazy and quarrelsome Beloutchi sentinels, armed with long lances, kept a sort of watch.

However, at the time of landing the balloon, the Consul received notice that the population of the island intended opposing it by force. Blinded by fanatic passion, they conceived that the Christian who had arrived in order to ascend into the air, was about to do so with intentions hostile to their religion, or to the Sun or Moon, both of which luminaries are objects of worship to African nations.

The Consul, with the Doctor and Captain Penner, talked the matter over. With the assistance of the garrison, which they could obtain, they might have landed the balloon, but the Doctor feared an accident. After coming so far, it would be a pity to lose all their trouble by some unlucky injury to the balloon. What was to be done? They were quite at a loss.

"What shall we do?" said the Doctor. "I don't quite see any way out of this."

"I've got it," cried the Consul. "You see those islands beyond the port; land your balloon on one of them; surround yourself with a *cordon* of sailors, and you have no risk to run."

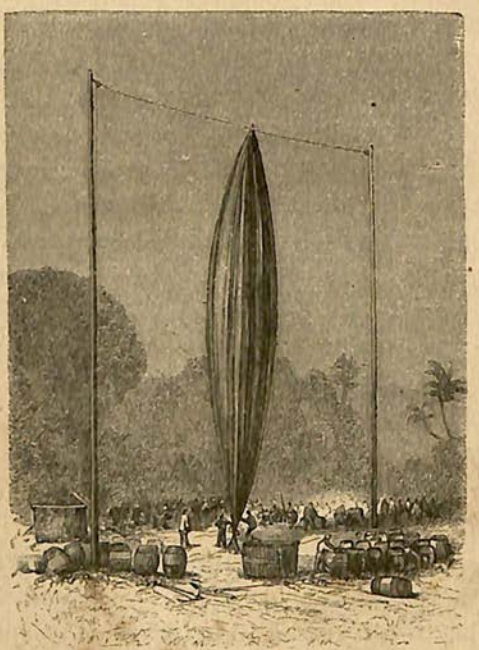
"Capital," said the Doctor; "and we will be at our ease in finishing our preparations."

Captain Pennet agreeing with this view, the *Resolute*, stood over to the isle of Koumbeni; and on the morning of the 16th April, the balloon was safely placed on a clearing between two of the large woods, with which the whole of the island was covered.

Two masts were raised eighty feet high, and placed at a like distance from each other; pulleys fixed at the tops soon hoisted the balloon by means of a transverse cable—it was then entirely empty. The interior balloon was so attached to the exterior one that it rose with it simultaneously. At the lower end of each balloon were fixed the two pipes for the introduction of the hydrogen.

The 17th was passed in arranging the apparatus destined to produce the gas. This was composed of thirty casks, in which the decomposition of the water was to be effected by means of old iron and sulphuric acid, mixed with a large quantity of water. The hydrogen would be collected in an enormous central cask, after having been washed on its passage, and thence it would pass into each

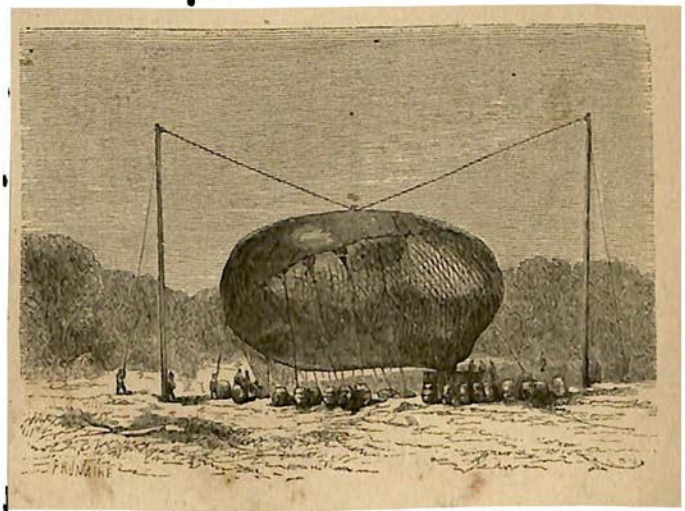
balloon by the pipes for introducing it. In this way each of them could be filled with a perfectly ascertained quantity of gas. For this operation there would have to be employed 1,866 gallons of



sulphuric acid, 16,050 lbs. of iron, and 966 gallo of water! This operation began the followi night, or rather about three o'clock in the morni —it lasted nearly eight hours.

On the morrow the balloon, recovered with i net, balanced itself gracefully over the car, he

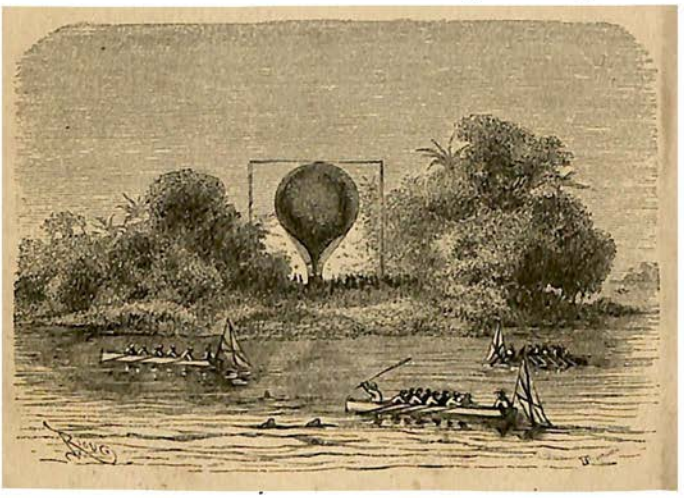
down by a great number of sacks filled with earth. The apparatus for expansion was mounted with great care, and the pipes coming from the balloon were attached to the cylindrical box. The anchors, ropes, instruments, wrappings for the journey, the tent, provisions, and arms, were soon stowed away in the car in the places assigned to them; a supply of water was obtained at Zanzibar. The 200 lbs.



of ballast were divided into fifty sacks, placed at the bottom of the car but ready to the hand. These preparations were finished about five o'clock in the evening; sentinels watched incessantly around the island, and the boats of the *Resolute* furrowed the channel.

The negroes continued to manifest their anger by cries, grimaces, and contortions. The priests

or sorcerers ran about among the irritated groups, keeping up the excitement; some fanatics even tried to reach the island by swimming, but they were soon driven away. Then began their witchcraft and incantations; the rain-makers, who pretend to command the clouds, called the hurricanes and hail-storms to their succour. Others collected leaves of all the different trees of the country, and



boiled them over a little fire, whilst a sheep was killed by having a long needle plunged into its heart. However, spite of all their ceremonies, the sky remained clear, and they got nothing for their mutton and grimaces. The negroes then gave themselves up to all kinds of furious orgies, getting drunk on "tembo," a fiery liquor, procured from the cocoa tree, or on a frightfully heady beer called

"togwa." Their songs were heard far into the night.

At six o'clock in the evening all met at dinner at Captain Pennet's table. Kennedy kept muttering some words nobody could catch, and kept his eyes fixed on the Doctor. The dinner was not a lively one, the reflection would cross every mind that

they might never again behold the intrepid travellers who were so soon to leave them. They slept that night on board, and at six o'clock the next morning reached the island of Koumbeni.

The balloon poised itself lightly in the breath of the east wind. The sacks of earth which had held it were now replaced by twenty sailors. Captain Pennet and his officers were all present. At this

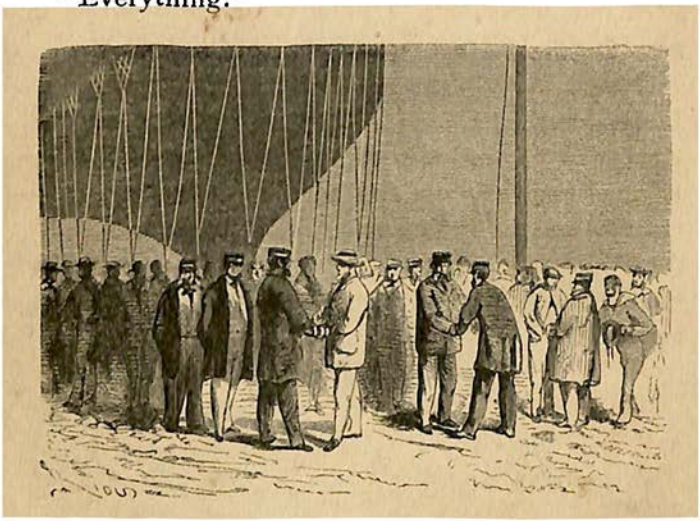
moment Kennedy walked straight to the Doctor, and taking him by the hand, said—

"Is it certain, Samuel, that you go?"

"That is absolutely decided, my dear Dick."

"I have done all that lay in my power to hinder this voyage?"

"Everything."



"Then, as my conscience is easy on that score, I'll go with you."

"I was sure of it," said the Doctor, his face showing for a moment that he was deeply moved.

The last good-bye was said, and everybody had shaken hands with the three brave travellers. At nine o'clock they all three entered the car; the Doctor lighted his furnace to increase the flame, so as to get rapidly a large amount of heat.

The balloon, which had kept a perfect equilibrium, began to rise at the end of some minutes. The sailors were letting the ropes slip through their hands—the car was already twenty feet high.

"Friends!" cried the Doctor, standing between his two companions, and taking off his hat, "let us give our aerial ship a name which will bring it good luck; let it be christened The Victoria!"

A loud hurrah ensued—"Long live the Queen! Long live England!" At this moment the buoyancy of the balloon increased prodigiously. Fergusson, Kennedy, and Joe bade a last adieu to their friends. "Let go all!" cried the Doctor; and the "Victoria" rose rapidly in the air, whilst the four cannonades of the *Resolute* thundered in her honour.

CHAPTER V.

Across the Straits.—Mzima.—Joe's Proposition.—Uzaramo.—The unfortunate Maizan.—Mount Duthumi.—The Doctor's Maps.—Night on a Nopal Tree.

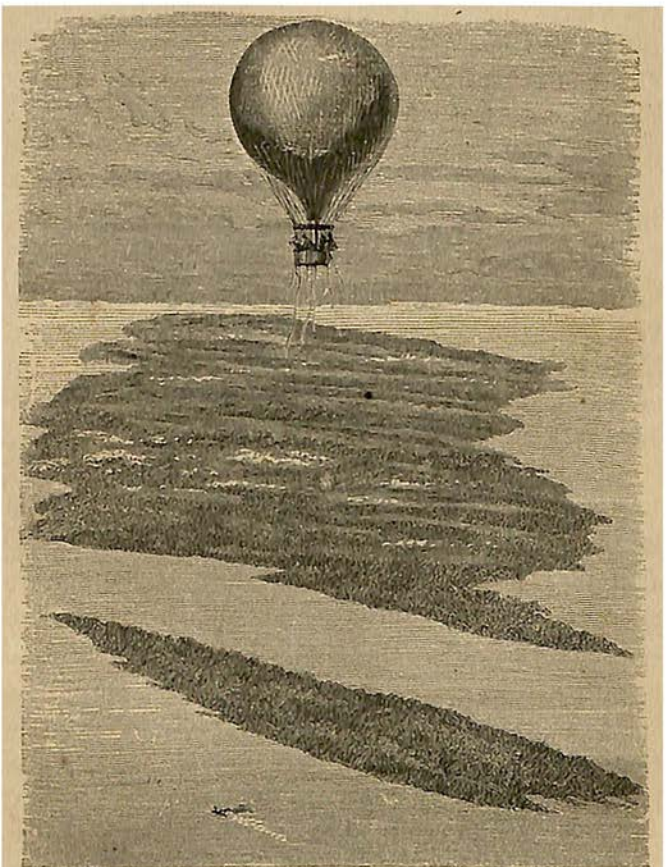
THE air was clear, the wind moderate. The "Victoria" rose almost perpendicularly to a height of 1,500 feet, which was indicated by a depression of the barometer of very nearly two inches. At that height a more decided current carried the balloon towards the south-west.

What a magnificent sight was unrolled under the eyes of the travellers! The whole island of Zanzibar was seen at a glance, its rich colours were quite distinguishable as it appeared to slip away from under them; the fields looked like patterns of bright colours, and the great woods and copses looked like bouquets of miniature trees. The people of the island looked liked insects; the hurrahs and other cries died away in the air, and even the reports of the *Resolute's* cannon could be but faintly heard.

"How beautiful all this is!" cried Joe, breaking silence for the first time.

He got no answer. The Doctor was busy observ-

ing the variations of the barometer, and making notes of the different details of his ascension.



Crossing the Straits.

Kennedy was looking intently at the scene, as if his eyes could not embrace enough of it.

The rays of the sun, added to the heat of the furnace, now further expanded the gas, and the "Victoria" rose to a height of 2,500 feet.

The *Resolute* appeared like a cockboat, and the Coast of Africa to the westward was distinguished by a line of snowy foam.

"You don't speak," said Joe.

"No; we look about us," replied the Doctor, as he directed his glass towards the Continent.

"For my part I can't help speaking."

"Please yourself, Joe; speak as much as you like."

So he gave himself up to the delivery of no end of exclamations—Oh! Ah! By Jove! and other like exclamations kept bursting from his lips.

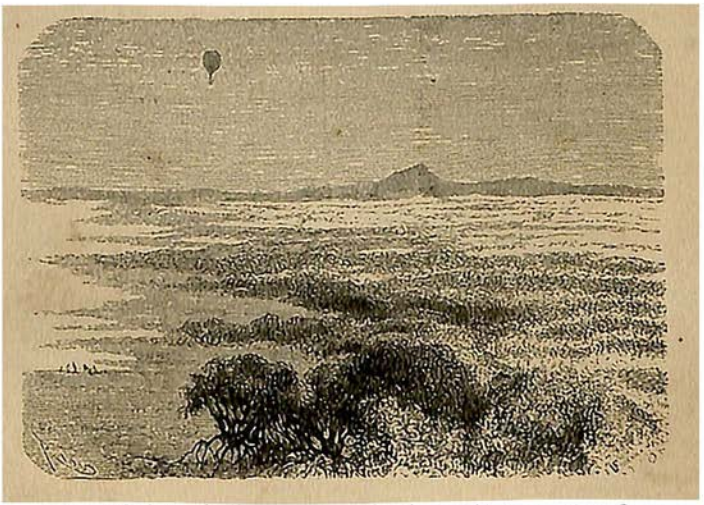
Whilst crossing the sea, the doctor thought it best to keep at the elevation they had attained, for he could then hold in view a much more extended line of coast. The thermometer and barometer suspended in the interior of the tent, and a second barometer outside, was intended for use during the night watches.

At the end of two hours, the "Victoria" travelling at the rate of a little more than eight miles an hour, drew sensibly nearer to the coast.

The Doctor determined to approach nearer to the earth; he therefore lowered the flame of his furnace, and very soon the balloon descended to within three hundred feet of the ground.

They were soon over that part of the East Coast

of Africa which is called Mzima. Thick groves of mangrove trees lined the shores; and as it was then low tide, they were able to see their thick roots torn and broken by the storms of the Indian Ocean. The sandy shoals which had first been seen along the coast were now just visible; and far in the north-west Mount Nguru raised his lofty head to the heavens.



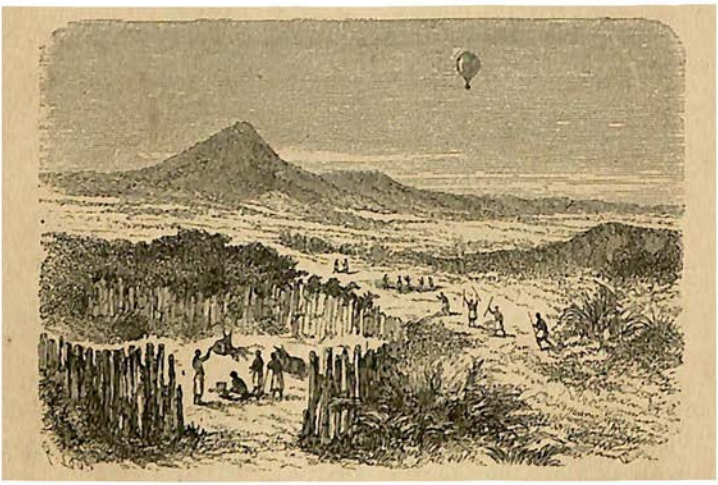
The "Victoria" now reached a village, the first they had passed, which, on reference to the map, the Doctor found was called Kaole; all the assembled population filled the air with howlings of rage, or cries of fear; and arrows were vainly fired against this monster of the air, which hovered mysteriously, far out of the reach of their impotent rage.

The wind now bore round to the south; but the Doctor did not mind that change of its direction; on the contrary, it would allow him to follow over the route pursued by Burton and Speke.

Kennedy had become as loquacious as Joe, and they kept up a mutual chorus of admiration.

"Confound coaches!" said one.

"Deuce take steamers!" said the other.



"Don't talk to me of railways," said Kennedy, "that run you across a country without letting you see it."

"A balloon for me," cried Joe; "no thought of walking; and nature displays herself under your very eyes!"

"What a magnificent sight; it is perfectly ecstatic; like a dream as one swings in a hammock."

"Suppose we were to breakfast," said Joe, whom the keen air had given an appetite.

"A good idea, my lad."

"Oh! the cooking won't take long—some biscuit and preserved meat."

"And coffee for all," said the Doctor. "I will permit you to borrow a little heat from my furnace, there is plenty of it; and that will prevent any accident from fire."

"That would be terrible," said Kennedy. "It is uncommonly like having a powder magazine up above us."

"Not a bit," said Fergusson; "but even if the gas did catch light it would burn little by little, and we should descend to the earth, which would be a nuisance; but don't be afraid, our balloon is hermetically closed."

"Let us fall to then," said Kennedy.

"And here, gentlemen," said Joe, "is some coffee, which I have just made, and which I think will please you."

"The fact is," said the Doctor, "that Joe, among a thousand virtues, has a remarkable talent for making this delicious beverage; what he puts in it I never knew."

"It is no great secret, master," said Joe; "and certainly not up here. I use the three best coffees procurable in equal quantities—those of Mocha, Bourbon, and Rio-Nunez."

Breakfast and coffee despatched, each resumed his post of observation.

The country over which they were passing was of great fertility; numerous winding paths were passed, hidden every now and then under the vaults of brilliant foliage; and they floated over cultivated fields of tobacco, Indian corn, and barley already nearly ripe; whilst here and there the scene was diversified with rice fields, with their straight stalks, and their flowers of gaudy purple.

Near the villages were seen huge cages reared on piles, in which were enclosed the sheep and goats of the inhabitants, to preserve them from the attacks of the leopard. Everywhere the prodigal soil produced a dense and luxurious vegetation.

At every one of the villages which they passed the same scenes were reproduced, the same cries of horror, or stupefaction at the sight of the "Victoria" again heard, and the Doctor prudently kept himself well out of arrow flight; as the inhabitants trooping from their huts for some time pursued the travellers with their useless imprecations.

At noon, the Doctor, on consulting his map, found that they were now over the country of Uzaramo. The land beneath seemed absolutely to bristle with cocoa-nut trees and cotton trees, over which the "Victoria" appeared to be enjoying herself. Joe found the vegetation quite natural, as soon as he was told it was really Africa.

Kennedy was watching the hares and quails beneath, which only wanted shooting; but under

Country of the Uzaramo.

the circumstances it would have been only powder and shot thrown away, as there was no possibility of picking up the game.

The aeronauts were travelling at the rate of twelve miles an hour, and very soon reached longitude 38° 20′, with the village of Tounda beneath them.

"There is the spot," said the Doctor, "where Burton and Speke were seized with violent fevers, and for a moment believed that their expedition was at an end; for already, though they were not very far from the coast, fatigue and privations had made themselves severely felt."

In fact, in this part of Africa, a perpetual malaria reigns. The only plan possible for the Doctor to escape it was to rise far above the miasma of that humid ground, from which, under the glowing sun, exhaled such dangerous emanations.

A little farther on they came on a caravan resting in a "kraal," waiting for the coolness of evening to resume its journey.

These kraals are large open spaces surrounded by thick hedges and jungle, where the traders take shelter not only against the attacks of wild beasts, but against those of the predatory tribes of the country. They could see the natives run and scatter themselves at the approach of the "Victoria." Kennedy wanted to have a nearer look at them, but this the Doctor would not hear of.

"The chiefs are armed with muskets," said he,

"and our balloon is a very easy bull's-eye to put a bullet in."

"Would a hole made by a bullet bring us down with a run?" asked Joe.

"Not at once; but very soon that hole would become a large rent, by which all our gas would escape."

"In that case," said Kennedy, "let us keep at a respectful distance from these miscreants. What do they think, I wonder, to see us flit through the air? I believe they have a mind to worship us!"

"Let them if they like," replied the Doctor, "but at a distance. But notice," he continued, "the aspect of the country already changes; villages are rarer, mango trees have disappeared—their growth does not extend beyond this latitude. The ground is becoming hilly, and warns us of our approach to some not distant mountains."

"On this side I seem able to make out some heights already."

"To the west—these are the first hills of the range of Ourizara—doubtless Mount Duthumi, behind which I hope to find a shelter where we can pass the night. I must set my furnace going, as we must keep at a height of five or six hundred feet."

"It was a famous idea of yours, that, sir," said Joe. "The manœuvre is neither difficult nor fatiguing; you turn a stop-cock, and there you are!"

"This is much more comfortable," said the hunter, when the balloon had risen, "the reflection of the sun from that red sand was becoming unbearable."

"What magnificent trees!" suddenly cried Joe; "they are splendid. Why, a dozen of them would make a forest!"

"These are Baobabs," said the Doctor. "Look, there is one which is at least a hundred feet in circumference! Perhaps it was under that very tree that poor Maizan perished in 1845. He was a Frenchman who had pushed on thus far alone, to the village of Deje la Mhora, now beneath us, when he was seized by the chief, fastened by the foot to a baobab tree, and the ferocious negro began to cut him to pieces joint by joint, singing his war-song the while. After making a first cut at the throat of his victim he paused to whet his knife, now blunted with his butchery, but, unable to wait for that, he literally tore the unhappy man's head from his shoulders! The young French explorer was only twenty-six."

"I don't wish to stop there, master," said Joe. "Let us ascend; let us ascend!"

"All the more willingly that Mount Duthumi rises before us. If my reckoning is right we shall have passed it before seven o'clock this evening."

"We are not going to travel at night?" asked the hunter.

"No, as little as possible. With precaution and vigilance it could be done without danger, but it won't do merely to cross Africa; we must see it."

"Hitherto we've had nothing to growl about, master—a country the best cultivated and the most fertile in the world, instead of a desert. Who would believe geographers!"

"Let us wait, Joe; let us wait; we shall see later on."

At half-past six that evening the "Victoria" was opposite Mount Duthumi. To cross it, it was necessary to gain a height of three thousand feet, consequently the Doctor had only to raise the temperature eighteen degrees.

It might almost be said that he managed the balloon with his hand; Kennedy indicated to him the obstacles to surmount, and the "Victoria" rose floating through the air, almost grazing the mountain crest.

At eight o'clock it descended on the opposite side, where the declivity was more gentle; the anchors were thrown out from the car, and one of them meeting the branches of an enormous nopal tree, caught firmly. Immediately Joe slid down the rope, and made it fast in the most secure manner. The silken ladder was thrown down to him, and he ascended smartly. The balloon remained almost motionless, sheltered from the easterly wind.

Fast to a Nopal Tree.

The evening meal was prepared, and our travellers, excited by their aerial trip, made a large breach in their provisions.

"What sort of way have we made to-day?" said Kennedy, still swallowing the last morsels of the meal.

The Doctor determined their position by lunar observations, and consulted the excellent map which he used as a guide. This was that published at Gotha, and was intended by the Doctor to be used during the whole voyage. It contained the itinerary of Burton and Speke to the Great Lakes, Barth's Soudan, Tejean's Lower Senegal, and Dr. Baikie's Delta of the Niger.

Fergusson also possessed a book which contained nearly everything known about the Nile—"The Sources of the Nile," by Dr. Beke, as well as the excellent maps to be found in the Transactions of the Royal Geographical Society of London.

On marking his position on the map he found that their route had taken them two degrees, or one hundred and twenty miles, westward.

Kennedy remarked that the route pointed still to the southward, but that satisfied the Doctor, who wished as much as possible to recognise the traces of former explorers.

The night was divided into three watches, so that two could always be asleep, guarded by the third. The Doctor's watch began at nine o'clock, Kennedy's at midnight, and Joe's at three in the

morning. Then Kennedy and Joe, rolling themselves in their thick rugs, stretched themselves under the tent, and slept peacefully whilst the Doctor kept watch.

CHAPTER VI.

Change of Weather.—Kennedy's Fever.—The Doctor's Physic.—Journey on Land.—The Basin of Imengé.—Mount Rubeho; Six thousand Feet high.—A Halt by Day.

THE night passed quietly, but on Saturday morning Kennedy, on waking, complained of lassitude and feverish shiverings.

The weather changed; the heavens, covered with thick clouds, seemed preparing for another deluge. This was the miserable country of Zungomero, where it rains incessantly except for about fifteen days in the month of January.

The heavy rain was not long in assailing the travellers. Beneath them they could see that the roads cut up by "Nullahs," as the mountain torrents are called, had become impassable, choked up as they were everywhere with thorny bushes and gigantic lianas; and they could plainly perceive those sulphuric emanations of which Burton speaks.

"Burton is right," said the Doctor; "it is enough to make one believe that there is a corpse hidden behind every thicket."

"An abominable country," replied Joe. "I don't

think Mr. Kennedy is at all the better for having passed the night in it."

"True enough; I've got a regular fever," said the hunter.

"There's nothing wonderful in that, my dear Dick, for we are in one of the most unhealthy regions of Africa, but we are not going to stay here any longer. Let us be off."

Thanks to a clever manœuvre of Joe's, the anchor was unhooked, and by means of the ladder he regained the car. The Doctor quickly caused the gas to expand, and the "Victoria" took her flight, driven by a tolerably stiff breeze.

A few huts could with difficulty be seen through the pestilential fog, and the face of the country began to change, for it often happens in Africa that an unhealthy region of no great extent, borders closely upon districts perfectly free from malaria.

Kennedy suffered visibly, and the fever overpowered even his vigorous constitution.

"It is no joke being ill," said he, as he rolled himself in his rug and lay down under the tent.

"A little patience, my dear Dick," said the Doctor, "and you will be quickly cured."

"Quickly cured! By Jove, if you've got any drugs in your medicine chest that will put me on my legs, out with them at once. I'll swallow anything you like to give me without looking at it."

"Better than that, Dick. I am going to give you

a febrifuge which will cost nothing. It is very easy. I shall at once ascend above these clouds which are drenching us, and get out of this pestilential atmosphere. Give me ten minutes to expand the hydrogen."

Ten minutes had not slipped by before they had risen above the zone of clouds and rain.

"Wait a minute, Dick, and you will begin to feel the influence of the pure air and of the sun."

"What a remedy!" cried Joe; "it's marvellous."

"Not at all—only natural. They do the same thing in Europe, and elsewhere, every day. I only take my patient into good air."

"This balloon is a little paradise," murmured Kennedy, who was a good deal easier already.

"At all events we are travelling in that direction," said Joe, quite seriously.

The immense masses of cloud heaped together at this moment beneath the balloon, presented a curious sight; they rolled one over the other, the whole surface sending back in glittering reflections the rays of the sun which shone on it.

Still higher went the "Victoria," till a height of four thousand feet was reached, and the thermometer indicated a decided lowering of the temperature. They no longer saw the earth, but about fifty miles to the west, Rubeho raised high its sparkling head, and formed the limit to the country of Ugogo, in longitude 36° 20′.

Although the wind was now carrying them along

at twenty miles an hour, our travellers felt nothing of that rapidity, experiencing no shaking, nor even the sense of locomotion.

Three hours later, the Doctor's prediction was verified; Kennedy no longer shivered with fever, and his appetite began to return.

"Well, this beats the sulphate of quinine," cried he with glee.

"On my word,' said Joe, "I shall retire here to spend my old age—my last years."

At ten in the morning it cleared up; a rift appeared in the clouds, and the earth was again visible, and the "Victoria" began slowly to descend. The Doctor wanted a current which would carry him more to the north-east, and he found it at six hundred feet from the ground.

The country before them was now again changed in its aspect—it was broken up and even hilly. In the distant east, the district of Zungomero had disappeared, with the last cocoa trees in that latitude.

Very soon, from the crests of the mountains, bolder and rockier spurs came down, and threatened to arrest their course. Here and there some lofty peaks showed themselves, and it became necessary to keep a bright look-out at every moment for the needle-like cones which seemed to rise unexpectedly.

"Breakers ahead!" shouted Kennedy.

"All right, Dick, we won't touch them." And

really the Doctor managed his balloon with marvellous dexterity.

"If we had had to walk through this muddy country," said he, "we would have had to crawl along through that poisonous slush. Since our departure from Zanzibar half our beasts would have been dead by this time from fatigue. We would have had the appearance of spectres, and have been plunged in despair. We would have been in continual quarrels with our guides and our porters, besides being exposed to their unbridled brutality. All day long a damp, insupportable, overwhelming heat; at night, often intolerable cold; and the stings of flies whose mandibles bite through the thickest clothing, drive one mad. And all this, without taking into account wild beasts and ferocious savages!"

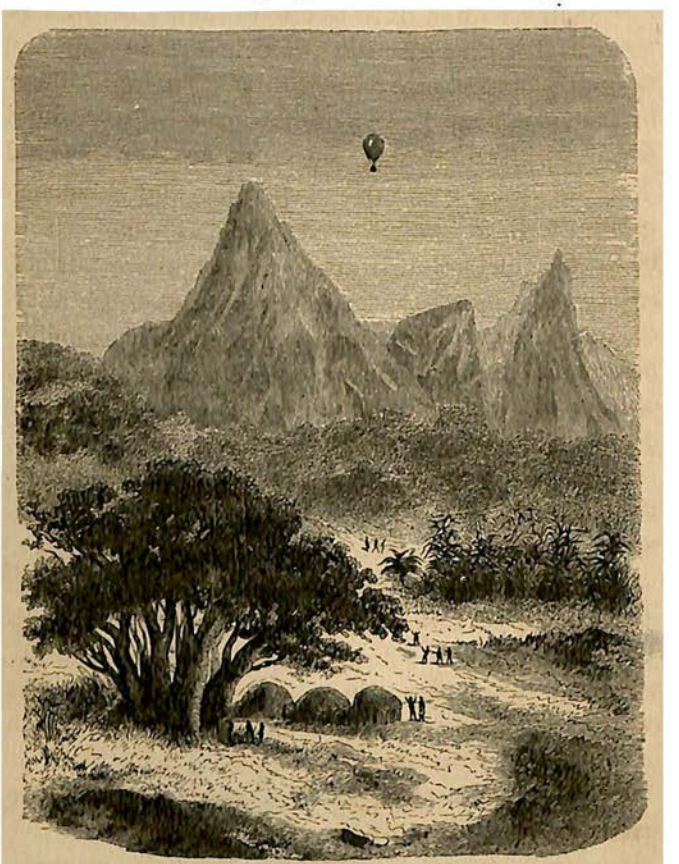
"I have no wish to try it," returned Joe, simply.

"I don't exaggerate anything," said Fergusson. "The stories of the sufferings of travellers, who have had the boldness to venture into these regions, has often brought tears to my eyes."

By eleven o'clock they had left behind the basin of Imengé, where the tribes scattered over the little hills vainly menaced the "Victoria" with their arms, and soon reached the last inequalities of the ground which precede Mount Rubeho. These form the third and most elevated chain of the mountains of Usagara.

"Attention!" cried the Doctor. "We are ap-

proaching Rubeho,—a name, by-the-bye, which means in the language of the country, 'The



Mount Rubeho.

Passage of the Winds,'—and to give his rocky peaks a clear berth we must go higher still. If

my map is right, we must attain an elevation of at least five thousand feet."

"Shall we often have to rise to such a height?"

"Rarely; the altitude of African mountains is very middling compared with the summits of those of Europe or of Asia. But in any case, our 'Victoria' will have no difficulty in flying over them."

Shortly the gas expanded under the influence of the heat, and the balloon took a marked track upwards. There was nothing dangerous in this expansion of the gas, for even now, at the height of six thousand feet, as indicated by the barometer having fallen nearly eight inches, the balloon was only three-fourths distended.

"Are we going much longer in this direction?"

"With an enormous balloon one could go far—the atmosphere of the earth reaches to a height of thirty-six thousand feet. Brioschi and Gay-Lussac went up till the blood flowed from their mouths and ears, until, in fact, respirable air ceased. Some years ago two brave Frenchmen, Barral and Bixio, ventured into these highest regions, but their balloon got torn——"

"And they fell!" cried Kennedy, quickly.

"Undoubtedly—but as wise men ought to fall, without doing themselves any injury!"

At six thousand feet the density of the air has already sensibly diminished; sound is transported with difficulty, and the voice less distinctly heard; the view of objects becomes confused; vision now

only sees large undetermined masses; men and animals are no longer visible; roads look like thongs, and great lakes like pools of water.

The Doctor and his companions felt themselves in an abnormal condition; an atmospheric current of extreme velocity was bearing them beyond the arid mountains, whose summits were covered with vast fields of everlasting snow, and whose basaltic formation proclaimed the agencies which had been at work ere man had appeared on the earth.

The sun shone in the zenith, and his rays fell straight on these desert heights. The Doctor made an exact drawing of these mountains, showing the manner in which they run; but the "Victoria" now descended the declivity opposite to Rubeho, passing by the side of a slope well-wooded and covered thickly with trees of a dark and dismal green; then came mountain crests, and deep ravines running through the desert which lies before the country of Ugogo; whilst lower down nothing was to be seen but yellow plains, burnt up and cracked with the heat, here and there thinly strewn with saline plants and thorny brushwood.

The horizon was embellished with what looked like bushes, but on nearing it, it proved to be a forest, and here the Doctor began to descend; the anchors were thrown out, and very soon one of them was hooked fast in the branches of a great sycamore.

Joe, sliding down the rope, saw that the anchor

was secure; whilst the Doctor kept up just enough of heat to retain the balloon in the air. The wind had entirely gone down.

"Now, then, friend Dick," said the Doctor, "take a couple of your double-barrels, one for yourself and the other for Joe, and see if you two can't bring in some slices of antelope for our dinner."

"Here goes!" cried Kennedy, as he climbed over the car and descended.

The Doctor, relieved of the weight of his two companions, could now extinguish his furnace entirely.

"Mind you don't fly away, master," cried Joe.

"Make yourself easy. I am very safely secured. I shall amuse myself by putting my notes in order. Good sport to you, and take care of yourselves. From my position I can see over the country, and if I see anything at all suspicious, I shall fire my rifle. That is to be the signal for your return."

"Agreed!" cried Kennedy, as he and Joe started on their hunt.

CHAPTER VII.

The Forest of Gum Trees.—Blue Antelopes.—The rallying Signal.—An unexpected Assault.—Kanyemé.—A Night in the Air.—Mabunguru:—Jihoue-la-Mkoà.—Water Supply.—Reach Kazeh.

ALL the country, arid, parched, formed of argillaceous earth, cracked and split up by the heat, seemed a desert. Here and there were seen traces of unfortunate caravans in bones of men and beasts, blanched by exposure to the tropical sun, and mixed together in the sandy dust by the wind of the desert.

After a good half-hour's walk, Kennedy and Joe reached a forest of gum trees, which they entered, the eye on the watch and the finger on the trigger. They knew not with whom or what they might have to do.

Joe, though no crack shot, knew very well how to handle a gun.

"Pretty walking it is in this infernal country," said he, kicking up against the pieces of quartz, with which it was thickly strewn.

Kennedy made a sign to his companion to be silent and stand still. They had of course to do

without dogs; and, however clever Joe might be, he had not the nose of a setter or a pointer.

In the bed of a torrent, where some pools of water were still left, a herd of ten antelopes were quenching their thirst, and these graceful animals, smelling danger, were evidently restless, between every mouthful of water raising their elegant heads quickly, and inhaling through their mobile nostrils the wind blowing from the position of the hunters. Kennedy stalked them, hiding behind some large rocks and stones, whilst Joe stood immovable. At length Dick raised his gun and fired. The herd disappeared in the twinkling of an eye, all but a male antelope, which, struck just behind the shoulder, fell as if struck by lightning.

Kennedy rushed to his quarry. It was a blowebock, a magnificent animal, of a pale blue colour running into grey, the belly and inside of its legs as white as snow.

"A very good shot," said Dick. "It is a rare species of antelope; and I should like to prepare its skin so as to preserve it."

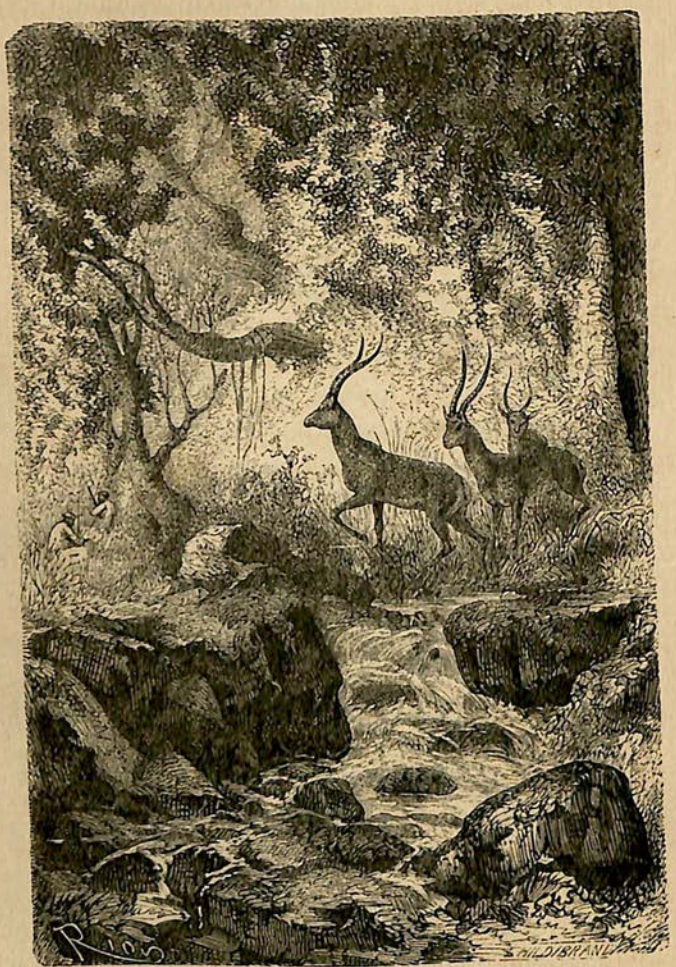
"Do you really mean it, Mr. Dick?"

"Of course I do. Look what a splendid skin."

"But the Doctor would never allow the additional weight."

"Quite right, Joe; but it is a pity to have to leave all that splendid animal behind us."

"All of it? Oh! no, Mr. Dick; we must get some of the nutritive advantages it possesses;



Antelope Hunting.

and if you will allow me, I shall acquit myself as well as the best master-butcher in London."

"Easy, my friend. Do you not know that as a hunter it is no more trouble for me to skin my game than to shoot it?"

"I am sure of it, Mr. Dick; and if you will then take the trouble to make a fire on these stones,—you will find plenty of dead wood—and in a few minutes I shall be ready to use it."

"That is quickly enough," replied Kennedy; and he proceeded with the construction of his hearth, which in a few minutes later burnt cheerfully.

Joe had cut from the antelope a dozen cutlets, and some excellent slices from the fillet, which he speedily transformed into a savoury grill.

"This will please friend Samuel," thought the hunter.

"Do you know what I am thinking about, Mr. Dick?" suddenly said Joe.

"What you are busy about, no doubt—your steaks."

"Not the least in the world. I was thinking what a pretty figure we should cut if we could not find the balloon."

"What an idea! Do you think the Doctor is going to abandon us?"

"No; but suppose the anchor was to get loose?"

"Impossible! Besides, the Doctor would have no difficulty in descending again. He thoroughly understands the balloon."

"But if the wind carried him off, and he couldn't come back to us?"

"Look here, Joe; a truce to your suppositions, they have nothing pleasant about them."

At this moment a shot rang through the air.

"Hallo!" cried Joe.

"My rifle—I recognise the crack of it."

"A signal!"

"We are in danger!"

"Perhaps he is," said Joe

"Come on!"

The hunters quickly gathered up the produce of the chase, and retook their way, guided by the branches which Kennedy had broken coming along. The thickness of the wood effectually prevented their seeing the "Victoria," from which, however, they could not be far distant.

A second shot was heard.

"This is pressing," said Joe.

"Good—another report."

"It seems to me like a personal defence."

"Let's hurry!" and they set off at top speed.

Arrived at the skirt of the wood, they saw the "Victoria" in its place, and the Doctor in the car.

"What's going on there?" asked Kennedy.

"Good heavens!" exclaimed Joe.

"What do you see?"

"Down there; a troop of negroes besieging the balloon!"

And truly, two miles off some thirty individuals

were crowding round, howling, gesticulating, and dancing wildly round the foot of the sycamore; some, climbing into the tree, had advanced to the highest branches. The danger seemed imminent.

"My master is lost!" cried Joe.

"Come on, Joe; keep cool, and a bright look out. We hold the lives of four of these black rascals in our hands. Push ahead!"

They had cleared a mile at top speed, when another shot came from the car. It hit a big fellow who was hoisting himself by the rope attached to the anchor, and a lifeless body fell from branch to branch, till it hung suspended twenty feet from the ground, its two arms and legs swaying about in the air.

"Hallo!" cried Joe, stopping; "how the deuce does that animal there hold on?"

"It don't matter," cried Kennedy; "let us run, let us run."

"Ah! Mr. Kennedy," cried Joe, bursting out laughing; "by his tail! 'tis by his tail! A monkey! they are nothing but monkeys!"

"That's better than men at all events," cried Kennedy, as he threw himself into the midst of the howling band.

It proved to be a troop of cynocephalous monkeys, formidable enough to encounter, as they are fierce and brutal and horrible to look at, with their doglike heads and muzzles, from which they get their name.

A few shots settled the matter, and the grimacing

troop ran away, leaving several of their number on the ground.

In an instant Kennedy caught hold of the ladder; Joe hoisted himself into the sycamore and loosened the anchor, the car lowered to just where he stood, and he regained it without difficulty. A few minutes after, the "Victoria" rose into the air and took an easterly course, impelled by a moderate breeze.

"That was an assault," said Joe. "We thought you were besieged by the natives."

"It was luckily only monkeys," replied the Doctor.

"At a distance there didn't seem much difference, my dear Samuel."

"Nor even when near," said Joe.

"Be that as it may," replied Fergusson, "that attack by monkeys might have had very serious consequences. If the anchor had lost hold under their repeated shakings, who knows where the wind might have carried me?"

"What did I say to you, Mr. Kennedy?"

"You were right, Joe; but right as you were, you were at that moment getting ready the antelope steaks, and my appetite is as good as ever!"

"I believe it," said the Doctor; "antelope meat is delicious."

"Try it then, sir," said Joe; "dinner is ready!"

"By my faith," said Dick, "these slices of venison have a game flavour not to be despised."

"I should like to live on them all my days," said Joe, "especially with a glass of grog."

The Doctor took Joe's hint, the grog was duly prepared, and swallowed reflectively.

"Well, Dick, are you sorry you accompanied us?"

"I should like to have seen what would have prevented me," said Dick, with a determined air.

It was now four o'clock in the afternoon; the "Victoria" encountered a more rapid current, the ground gradually rose, and soon the barometer indicated a height of 1,500 feet above the level of the sea. The Doctor was obliged to keep up his balloon by considerably expanding the gas, and the furnace was kept going incessantly.

At seven the "Victoria" was over the basin of Kanyemé, and the Doctor at once recognised the vast clearing of ten miles in extent, with its villages hidden amid the verdure of baobab trees, &c. Here resides one of the Sultans of the country of Ugogo, and here civilisation is not perhaps so backward; members of the family are not often sold into slavery, but beasts and people all live together in round huts, built without timber, and looking for all the world like haycocks.

Past Kanyemé the soil became arid and rocky; but in a fertile valley, at some distance from Mdaburu, vegetation reappeared in all its luxuriance. The wind went down with the day, and the atmosphere seemed to sleep. In vain the Doctor tried

for currents at different heights, so seeing this perfect calm in nature, he kept the balloon at an altitude of about 1,000 feet, and resolved to pass the night there. The "Victoria" was immovable in the deep silence of the magnificent starlight night. Dick and Joe sought their quiet couches and slept soundly during the Doctor's watch, when he at midnight was relieved by the Scot.

"If the least accident happens, wake me," said the Doctor; "and above all keep your eye on the barometer; it is the guide on which we must all depend."

The night was cold; there were 27° difference between its temperature and that of the day. With the advent of darkness had arisen the nocturnal concert of animals, which had been driven from their dens by hunger and thirst; the soprano of frogs was mingled with the yelping of jackals, whilst the deep bass of the lion swelled the sound of that living orchestra.

On retaking his post the Doctor perceived that the direction of the wind had changed during the night, and he saw from the compass that he was drifting in a north-east direction. In the last two hours they had travelled about thirty miles, and were now over Mabunguru, a stony country, strewn with blocks of syenite of a beautiful polish, and conical masses, like the rocks at Karnak, stood up from the ground like so many druidical dolmens. The ground was also covered with the whitened

bones of buffaloes and elephants; there were few trees, except to the eastward, where amid dense woods were hid the native villages.

"We are on the right road," said the Doctor; "there is Jihoue-la-Mkoa, where we will stop for a little time, as I want some water for my furnace. Try to hook on to something."

"I don't see any trees," said Dick. "Let us try nevertheless. Joe, throw out the anchors."

The balloon, gradually losing its ascensional power, approached the earth; the anchors began to drag, and presently one of them caught in a fissure of a rock, and the "Victoria" came to a stand-still.

The map showed several pools in the neighbourhood of Jihoue-la-Mkoa, and Joe descending, soon found one not far from a little desert village, took in his supply of water and returned, having seen nothing but some elephant traps, and indeed nearly fallen into one, where lay a half-devoured carcass; those and some fruit like a medlar, of which monkeys are fond, completed his list of discoveries. The Doctor recognised the fruit as that of the "Mbenbu," a tree very abundant in the western part of Jihoue-la-Mkoa.

As Fergusson was glad to get away from this inhospitable country, the water was got into the car without difficulty, for the ladder nearly reached the ground, and Joe, freeing the anchor, mounted nimbly up beside his master. Soon the furnace

Jihoue-la-Mkoa.

was at work, and the "Victoria" proceeded on her aerial voyage.

They were now about a hundred miles from Kazeh, an important establishment in the interior of Africa, where, thanks to a south-east current, our travellers might hope to arrive that day. They were travelling at the rate of fourteen miles an hour, and over a land so elevated that the management of the balloon was not so easy; but the Doctor did not wish to expand the gas too much, and followed very cleverly the sinuosities of a steep declivity, passing close to the villages of Thembo and Tura-wels. This latter country forms part of Unyamwesy, a magnificent district, where the trees attain the largest dimensions, among others the cacti especially, which here are gigantic.

At two o'clock, the weather magnificent, and a burning sun overhead which prevented the least current of air, the "Victoria" hovered over the town of Kazeh, situated 350 miles from the coast.

"We left Zanzibar at nine o'clock in the morning," said the Doctor, looking at his notes, "and after two days of voyaging across country, during which, including our deviations, we have travelled 500 geographical miles, here we are at Kazeh! Burton and Speke took four months and a half to come the same road!"

CHAPTER VIII.

Kazeh.—A noisy Market.—Appearance of the "Victoria."—The Wanganga.—The Sons of the Moon.—The Doctor's Walk.—Population.—The Royal Palace.—The Sultan's Wives.—A Royal Drunkard.—Joe is worshipped.—How they Dance in the Moon.—Two Moons at a time.—Instability of Divine Honours.

KAZEH, an important place though it is in Central Africa, is by no means a town; truth to tell, there is no town at all in the interior. Kazeh is nothing but a collection of six vast excavations. In these are enclosed the cottages, the huts for slaves, with little courtyards and little gardens carefully cultivated; onions, sweet potatoes, melons and mushrooms of the most exquisite flavour are grown there in perfection.

Unyamwesy is *par excellence* the Land of the Moon, the fertile and splendid garden of Africa; in its centre is the district of Unyanembé, a delicious country in which some families of Omani, who are Arabs of the purest origin, lead a lazy and happy life. They have long carried on the trade with the interior of Africa and Arabia, and traffic in gums, ivory, chintzes and calicoes, and slaves. These equatorial regions are furrowed by their caravans, which seek on all sides for articles

of luxury or delight for these wealthy merchants, who, in the midst of their women and servants, lead in that charming land an existence free from trouble, and generally spent in as horizontal a position as possible—always reclining, laughing, smoking, or sleeping.

Thus, then, these excavations, these native huts, these vast cleared spaces in which the markets are held, these fields of hemp and gardens full of vegetables, these beautiful trees, and fresh and fragrant shades,—these altogether make up Kazeh.

Here is the general rendezvous for caravans—those of the south with their slaves and their cargoes of ivory, those of the west with their cotton cloths and glass beads for the tribes around the Great Lakes.

In the markets, too, there reigns a perpetual agitation, a noise to which it is impossible to give a name, composed as it is of the cries of the half-bred porters, the sound of drums and cornets, the neighing of mules, the braying of asses, the songs of women, the squalling of children, and the blows given by the reed-stick of the Jamadar, or chief of the caravan, who seems to conduct this pastoral symphony.

There also were exhibited for sale, without an attempt at order, or rather in charming disorder, fabrics of the most glaring colours, glass beads, ivory, the tusks of the rhinoceros and the teeth of the shark, honey, tobacco, and cotton; and there

were in use the strangest methods of trading, for the price of every article depended upon the eagerness of the intending purchaser to possess it.

In a moment all this agitation, this constant movement, and this noise suddenly ceased. The "Victoria" had just made its appearance in the heavens, and, floating majestically over them, began slowly to descend, without swerving from its vertical position. Men, women, and children, slaves, merchants, Arabs, and negroes, all disappeared, and crept into the tembés or under the huts.

"My dear Samuel," said Kennedy, "if we continue to produce such wonderful effects, we shall hardly be able to establish commercial relations with these good folks."

"There is one commercial operation," said Joe, "which I think could be carried out very easily. That is, to descend quietly and carry off all the most valuable merchandise, without troubling ourselves about the merchants. That's the way to grow rich."

"Very good," said the Doctor, "but the natives have only been scared for a moment; superstition and curiosity will soon bring them back."

"You think so, sir?"

"We shall soon see; but it will be prudent not to approach too near. The 'Victoria' is not an ironclad, and is proof neither against a ball nor an arrow."

"Do you intend then, my dear Samuel, to hold a parley with these Africans?"

"If it can be done, why not?" replied the Doctor. "We are pretty certain to find at Kazeh, Arab merchants somewhat civilised, or, at least, not quite savage. I remember that both Burton and Speke speak highly of the hospitality of the inhabitants of the place; so I think we may make the attempt."

The "Victoria" during this conversation had been slowly descending, and now hooked one of her anchors into the top of a tree near the market-place.

At this moment all the population reappeared out of their holes, popping their heads out with a great deal of circumspection; several "Waganga," easily to be recognised by their insignia of conical shell-work, boldly advanced—these were the sorcerers or priests of the place. They carried at their girdles little black gourds, plastered with grease, and divers magical objects of a dirtiness quite in keeping.

By degrees the crowd came and joined them, the women and children surrounded them, drums again began their noise, and clapping their hands together, they extended them towards heaven.

"That is their way of beseeching any favour," said the Doctor; "and if I am not mistaken, we shall have great parts to play in the drama."

"Never fear, sir!" said Joe; "we will manage it."

"Oh! as for you, Joe, most likely they will make a god of you."

"That will do for me, sir; I dare say it is a very good part."

Just then one of the sorcerers, a "Myanga," made a gesture, and immediately all the clamour was hushed into silence. He addressed a few words to the travellers, but in a language unknown to them.

The Doctor, without having understood a word, uttered by chance some words of Arabic, and was immediately replied to in that language.

The orator delivered a highly flourished, long-winded speech, from which the Doctor quickly gathered that the "Victoria" was plainly taken for the Moon in person, and that that amiable goddess had deigned to come down to the town with her three sons—an honour which would never be forgotten in that land, beloved of the Sun.

The Doctor replied, with great dignity, that the Moon every thousand years made a journey throughout her empire, having found the need of showing herself nearer to her worshippers; and he begged of them not to permit the presence of the divinity to stand in the way of their making known all their wants and desires.

The sorcerer replied in his turn, that the Sultan, the "Mwani," who had been ill for years, besought the help of heaven, and he begged the Son of the Moon to visit him.

The Doctor communicated this invitation to his companions.

"And you really mean to go and see this negro king?" said Dick.

"Certainly; these appear to me very well disposed people; the atmosphere is still, there is not a breath of wind. We have nothing to fear for the 'Victoria.'"

"But what will you do?"

"Never fear, Dick; with a little medicine I will manage to pull through."

Then, addressing the crowd—

"The Moon, taking pity on the sovereign dear to the children of Unyamwesy, has entrusted his cure to us. Let him prepare to receive us."

The shouts, the songs, the demonstrations redoubled; all that vast swarm of black heads was again in motion.

"Now, my friends," said the Doctor, "we must look to everything, for we may be compelled to start at a moment's notice. You, Dick, will remain in the car and keep the furnace going, so as to have a sufficient ascending force, the anchor is firm and fast, so there is nothing to fear. I am going to descend to the earth; Joe will accompany me, only he will remain at the foot of the ladder."

"What! you are going alone to see this nigger?" said Dick.

"What, sir!" cried Joe, "do not you wish me to follow you to the end?"

"No, I shall go alone; these good folks having taken it into their heads that their great goddess the Moon has come to visit them, I shall be protected by superstition; so don't be afraid about me, and each of you remain at the post I have assigned you."

"Well, since you wish it," said Dick.

"Watch the expansion of the gas."

"That's settled."

The natives redoubled their cries, and loudly implored celestial aid.

"Hallo!" cried Joe, "they seem to be getting a little too imperious towards their good Moon and her divine sons."

The Doctor, provided with his little medicine-chest, descended to the ground, preceded by Joe, who, looking as grave and dignified as he could, sat down at the foot of the ladder, with his legs crossed under him like a Turk; the crowd making a respectful circle round about him.

Whilst this was going on, the Doctor, conducted to the sound of all sorts of instruments, and surrounded by the sorcerers performing religious dances, proceeded slowly towards the royal "tembé," which was situated at some distance from the town. It was about three o'clock, and the sun shone brightly—as indeed she ought, under such circumstances.

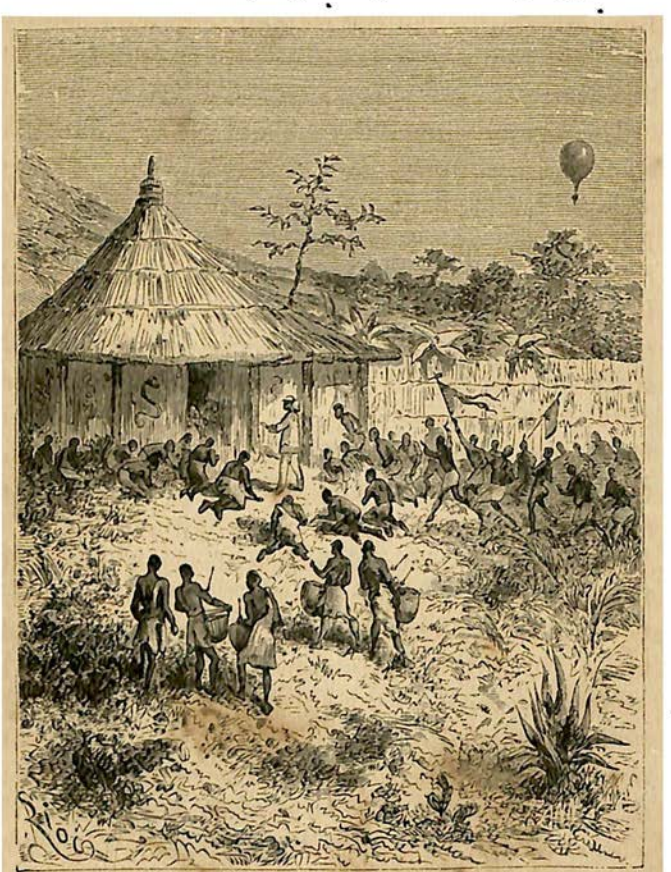
The Doctor walked with dignity, the "Waganga" surrounding him and keeping off the crowd.

Fergusson was met by the natural son of the Sultan, a likely enough lad, who, according to the custom of the country, was the sole heir to the paternal wealth, to the exclusion of the legitimate children. He prostrated himself before the Son of the Moon, who graciously raised him to his feet again.

Three-quarters of an hour afterwards, in the midst of all the luxuriance of a tropical vegetation, this enthusiastic procession reached the palace of the Sultan, a kind of square building, called Ititenya, and situated on the slope of a little hill. A description of verandah, formed by the thatch of the roof, reached along the exterior, supported by wooden posts, which had some pretension to being carved. Long lines of red clay ornamented the walls, intended to represent the figures of men and serpents; the latter looking a good deal more natural than the former. The roof did not rest closely upon the walls, so that the air could circulate freely, otherwise there were no windows and scarcely what could be called a door.

The Doctor was received with all the honours by the guards and favourites—men of a handsome race, the Wanyamwesi, a pure type of the populations of Central Africa, strong and robust, well-made, and of graceful carriage. Their hair, divided into a great number of little locks, fell upon their shoulders, and their cheeks were striped from the

temples to the mouth with incisions coloured black or blue. Their ears, frightfully distended, supported



Palace of the African Sultan.

discs of wood and thick plates of gum-copal; their dress consisted of brilliantly coloured calico, and

the soldiers were armed with the assagai, the bow and barbed arrows, poisoned with the juices of the Euphorbia, with the cutlass, and with the "cime" —a long sabre with saw-like teeth, and also with little battle-axes.

The Doctor entered the palace. There, notwithstanding the illness of the Sultan, the uproar, already bad enough, became still worse on the Doctor's arrival. He observed that a quantity of hares' tails and zebra skins were suspended from the lintel as talismans, and on entering he was received by his Majesty's women, to the harmonious sounds of the "upatu"—a sort of cymbal made out of the bottom of a copper pan, and the crash of the "kilindo"—a drum five feet in height fastened to the trunk of a tree, and on which two *virtuosi* hammered with all their might with their fists.

Most of the women were very good-looking, and laughingly smoked tobacco and hemp out of great black pipes. As well as could be distinguished beneath their gracefully draped robes they seemed well-made, and wore a kind of skirt or kilt fastened round their waists. Six of them, although placed in a corner by themselves and reserved for a cruel fate, were not the least gay of the company. These women were those who, at the Sultan's death, were to be buried alive with him, to divert and amuse him in his eternal solitude.

The Doctor, having taken in the whole scene at a glance, advanced to the wooden bed where lay

the sovereign. There he saw a man of about forty, perfectly brutalized by orgies of all kinds, and for whom nothing could be done. His illness, which had lasted for years, was nothing but perpetual drunkenness. This royal drunkard had a little while before lost all consciousness, and all the ammonia in the world would never put him on his feet again.

The favourites and women bending their knees, bowed down during this solemn visit.

By means of some drops of a strong cordial the Doctor reanimated for an instant this besotted wretch; the Sultan made a movement, and for a carcass that had given no sign of existence for hours, this symptom was received by a fresh burst of cries in honour of the physician. But he, who had had enough of it, by a rapid movement dispersed his too demonstrative adorers, walked out of the palace, and started towards the "Victoria." It was six o'clock in the evening.

Joe, during his absence, waited quietly at the foot of the ladder, the crowd paying him the greatest respect. Like a real Son of the Moon he let them do so. For a divinity he seemed a jolly fellow enough, not at all proud, and even familiar with the young nigger ladies, who never left off staring at him.

"Worship away, young ladies, worship away, I am a jolly devil, I assure you, although I am the son of a goddess."

They brought him propitiatory gifts, such as were usually laid in the fetich huts, consisting of ears of barley and of "pombé."

Joe thought the right thing to do was to taste this kind of strong beer, but his palate, though well used to gin and whisky, could not bear the strength of it, he made a frightful grimace, which his adorers took for an amiable smile. And then the young girls, mingling their voices in a drawling chant, executed a solemn dance round him.

"Ah! you call that dancing," said he. "I am not going to sit here still for that sort of thing. I'll show you what we call dancing in my country."

And he broke out into a most astounding jig, turning about, kicking out, twisting round, feet, knees, and hands all in motion, making the most extravagant contortions and incredible poses, accompanied with wonderful grimaces, so giving the native population a very strange idea of how the gods dance in the Moon.

Then, all these Africans, as imitative as monkeys, began at once to reproduce all his steps, his gambols, his hoppings; they lost not an action, forgot not an attitude, and then began such a row, such an uproar, that it is impossible even to give a faint idea of it.

When the fun was at its height, Joe perceived the Doctor. He was returning in hot haste in the midst of a howling and disorderly crowd: the sorcerers and the chiefs seemed terribly excited;

they surrounded him, crushed up against him, and threatened him.

This was a change with a vengeance! What had happened? Had the Sultan unfortunately succumbed under the hands of his celestial physician?

Kennedy from his post saw the danger without understanding the reason of it.

The balloon, strongly inflated, strained at the rope that held it, as if impatient to mount into the air. The Doctor reached the foot of the ladder. A superstitious fear had as yet kept back the crowd and hindered it from proceeding to offer any violence to his person; he rapidly ascended the rounds of the ladder, and Joe followed him with agility.

"There's not a moment to lose," said his master to him. "Never mind freeing the anchor; we must cut the rope: follow me."

"What is it all about?" said Joe, as he climbed into the car.

"What has happened?" cried Kennedy, rifle in hand.

"Look there!" said the Doctor, pointing to the horizon.

"Well?" asked Dick.

"Well! The moon!"

And there, indeed, rose the moon, red and splendid—a globe of fire upon a ground of azure.

It was really she! She and the "Victoria!"

Were there two moons, or were the strangers nothing but impostors, plotters, and false gods? Such were the natural reflections of the crowd, and hence their changed behaviour.

Joe could not restrain a burst of laughter.

The population of Kazeh, comprehending that their prey had escaped, uttered prolonged howls, and bows and muskets were pointed at the balloon. But one of the sorcerers made a sign. Instantly all arms were lowered, and he began to climb up the tree with the intention of seizing the anchor-rope, and so pulling the machine to the ground.

Joe darted to the spot where the rope was attached to the car, axe in hand.

"Shall I cut?" said he.

"Wait a bit," replied the Doctor.

"But this nigger—?"

"Perhaps we shall be able to save our anchor; there's always time to cut."

The sorcerer, having climbed into the tree, managed so well, that, by breaking the branches, he freed the anchor, which, violently pulled on by the balloon, caught him between the legs, and thus seated as on horseback, he started for the regions of the upper air.

The bewilderment of the crowd was immense to see one of its Waganga thus carried off into space.

"Hurrah!" cried Joe, while the "Victoria," thanks to its buoyancy, rose with great rapidity.

Carrying off the Sorcerer.

"He holds on well," said Dick, "a little trip won't do him any harm."

"Shall we let this nigger go slap?" asked Joe.

"For shame!" said the Doctor, "we will very quietly replace him on *terra firma*, and doubtless after such an adventure his magical power will be wonderfully increased in the belief of his contemporaries."

"I shouldn't be surprised if they made a god of him," said Joe.

The "Victoria" had now attained a height of about 1,000 feet. The nigger held on to the rope like grim death; his eyes were fixed in his head, and terror and astonishment had rendered him dumb.

A light wind from the westward drove the balloon beyond the town, and, half an hour later, the Doctor, seeing the country desert, lowered the heat of the furnace and approached the earth.

At twenty feet from the ground the nigger quickly made up his mind, and throwing himself off, luckily lighted on his legs and started as hard as he could run for Kazeh, without ever looking behind him; whilst thus suddenly disballasted the "Victoria" reascended.

CHAPTER IX.

Signs of a Storm.—The Country of the Moon.—Future of the African Continent.—The Country at Sunset.—Flora and Fauna.—The Storm.—The Zone of Fire.—The Star-spangled Sky.

"SEE what it is," said Joe, "to call yourselves Sons of the Moon without her permission! That satellite was very near doing us a dirty trick. Did you by any chance, sir, compromise her reputation by your physic?"

"By-the-bye," said Dick, "who was this Sultan of Kazeh?"

"An old drunken sot, nearly half dead, and whose loss won't be very severely felt; but the moral is, that honours are ephemeral, and it does not do to acquire too great a taste for them."

"So much the worse," said Joe, "to be a god, to be worshipped, suits me exactly. When up comes the moon, all red in the face, which proves she is not in a good temper."

Whilst this conversation was going on, and Joe was examining the star of the night from quite a new point of view, heavy clouds from the north began to cover the heavens—black and sinister-looking clouds. A brisk wind, met with at three

hundred feet from the earth, drove the "Victoria" towards the north-north-east; and although the azure vault above them was clear, the air felt heavy and oppressive.

About eight o'clock at night, our travellers were in longitude 32° 40′ and latitude 4° 17′; the atmospheric currents, under the influence of an approaching storm, drove them along at five-and-thirty miles an hour. The fertile and undulating plains of Mfuto passed rapidly under their feet. It was a magnificent sight, and was duly admired.

"We are fairly in the Country of the Moon," said the Doctor; for he kept to the name which antiquity had given it, doubtless because the moon has always been worshipped there. "It is truly a magnificent country, and it would be difficult, if not impossible, to find elsewhere a vegetation so beautiful."

"It wouldn't be very natural to find it about London," said Joe; "but it would be uncommonly pleasant. Why are all these beautiful things only to be found in savage countries like this?"

"And who knows," replied the Doctor, "that some day this country will not become the centre of civilisation? The nations of the future will perhaps be supported here, when the regions of Europe will have been exhausted to support their inhabitants."

"Do you believe that?" said Kennedy.

"Yes, I do, my dear Dick. Look at the march

of events, consider the successive migrations of nations, and you will arrive at the same conclusion. Asia was the first nurse of the world—was not she? For four thousand years, perhaps, she works, she becomes prolific, she produces; but when the golden harvests of Homer cease, her children abandon her exhausted and withered bosom. You see them then throw themselves into Europe, young and powerful, who has provided them for two thousand years; but already she is losing her fertility, her productive powers diminish every day; those new diseases which every year attack the products of the earth, those false harvests, so to speak, those insufficient resources, all announce a vitality which is being dried up, and an approaching exhaustion. Thus we see new nations rushing to the nourishing breasts of America, as a source not inexhaustible, but as yet unexhausted. In time, this new continent will become old; her virgin forests will fall beneath the axe of industry, her soil will become enfeebled from producing too much, because too much was asked of it. There, where two laughing harvests gladden the year, scarcely one will be able to be got from a land at the end of its resources. Then Africa will offer to new races the treasures accumulated for centuries in her bosom; those climes, fatal to foreigners, will have become purified by tillage and drainage; those scattered streams will unite in one common bed to form a great navigable artery. And this

country, over which we float, richer, more fertile, and more endowed with life than the others, will become some great kingdom, where discoveries will be made more astonishing than electricity or steam."

"Ah! sir," said Joe, "I should like to see that!"

"You must get up very early in the morning to do that, my lad! I fancy it would very likely be a very tiresome and wearisome epoch, in which industry would absorb all to its own profit; so many machines would be made that they would devour the men who made them. I often imagine that the last day of the world will be when some clever fellow makes a great boiler with a pressure of millions to the square inch, which will burst and blow the globe to atoms."

"Well, well," said the Doctor; "let us cease these discussions and content ourselves with admiring this land of the Moon, since it has been our good fortune to see it."

The sun, shooting his last rays beneath the masses of heaped-up clouds, glorified with a crest of gold every inequality of the ground; gigantic trees, flowering groves, mosses growing close to the soil—all received a share of that luminous glory. The country, slightly undulating, rose here and there into little conical hills; not a mountain was to be seen on the horizon; immense fences of brambles, impenetrable brushwood, and thorny jungles, divided the many clearings where the vil-

lages were seen; gigantic euphorbias surrounded them with natural fortifications, their branches intertwined with the coral-like limbs of the arbutus.

Soon Malagazari, the principal affluent of Lake Tanganayika, was seen winding its serpentine course amid masses of verdure, whilst numerous watercourses, born of torrents swollen by the rains, and lakes, sunk in their clayey beds, rush down to swell its waters.

From the "Victoria," our travellers beheld a perfect network of cascades, covering the whole of the western face of the country. Cattle with enormous humps pastured amid the rich meadows, and disappeared beneath the tall grasses; forests, perfuming the air, seemed to the eye like large bouquets; but in these bouquets lions, leopards, hyenas, tigers, might take refuge and shelter from the last heats of the tropical day. Sometimes the edge of the brushwood would wave to and fro as an elephant made his way through it, and the cracking of the branches could be heard as they yielded before his ivory tusks.

"What a hunting-ground!" cried Dick enthusiastically. "A shot fired in the open forest with your eyes shut would be certain to bring down some game worth bagging. Can't I get down and have a try?"

"Certainly not, my dear Dick; just look what a threatening night it is, and a storm brewing too, and storms in this country are terrible, I can tell

you; the very ground is one immense electric battery."

"You are right, sir," said Joe, "the heat has become suffocating; the wind, too, has completely fallen. One feels that something is going to happen."

"The atmosphere is surcharged with electricity," said the Doctor, "and every living being is sensible of this state of the air, which precedes the strife of the elements. I avow, I am quite impregnated with the feeling myself."

"Well, then, in that case, let us descend."

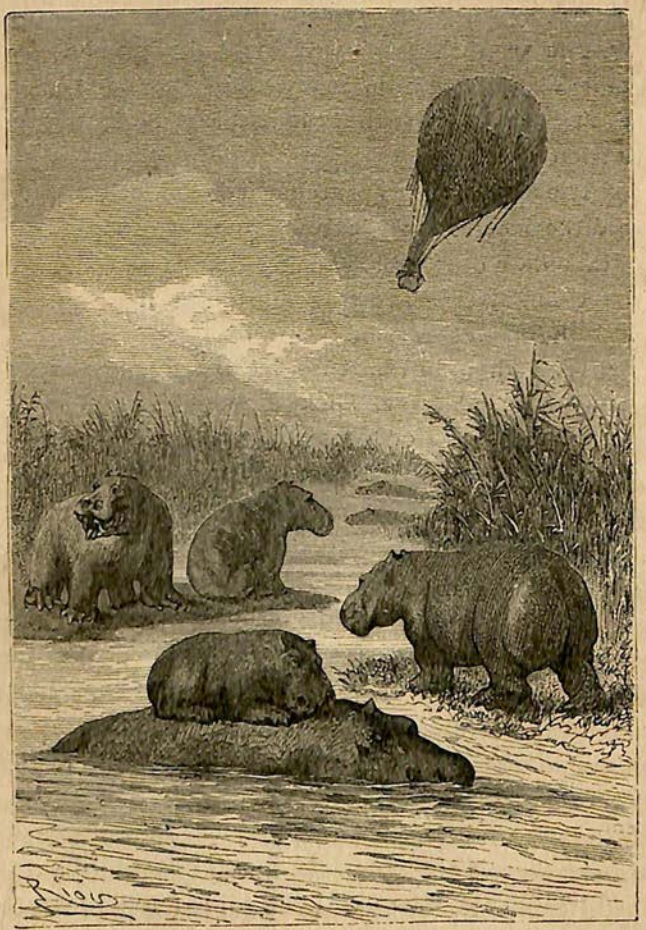
"On the contrary, Dick, I would much rather mount higher. I only fear being drawn out of my route by some crossing of the atmospheric currents."

"Do you wish, then, to change the direction we have been pursuing?"

"If I can, I shall try to get borne northward for seven or eight degrees. I shall try to get up to the presumed latitude of the Sources of the Nile; perhaps we may find some traces of Speke's expedition, or even the caravan of De Heuglin. If my calculations are correct, we are at longitude 32° 40′, and I should like to go right beyond the equator."

"Look there!" cried Kennedy, interrupting his companion; "look at these hippopotami creeping about out of these pools, and these crocodiles noisily snuffing the air."

"They feel suffocated," said Joe; "but travelling



Hippopotami at Play.

in this jolly way we can despise all such mischievous vermin. But look there, sir; look, Mr. Kennedy, at these bands of animals—there must be two hundred of them; they are wolves."

"No, Joe, they are wild dogs, and a famous race they are; they do not fear to attack even the lion. A meeting with them is the most terrible thing that can befall a traveller, for they immediately tear him in pieces."

"Good! Then it won't be Joe who will try to muzzle them!"

The silence which reigned around became more intense under the influence of the storm. It seemed as if the air had become too dense to transmit a sound, as a hall hung with tapestry loses all sonorousness.

The ring-doves, the coroneted cranes, the red and blue jays, the mocking-bird, and the gnat-snappers, had all disappeared under the foliage of the large trees. All nature proclaimed the advent of an approaching cataclysm.

At nine in the evening the "Victoria" remained motionless over Mséné, a vast collection of villages, scarcely distinguishable in the darkness. At times the glance of some wandering ray on the sullen water showed ditches regularly laid out, and by a last gleam of sunlight the eye could catch a glimpse of still and sombre palm trees, tamarinds, sycamores, and gigantic euphorbia.

"This is stifling," said the Scot, drawing a full

breath of the rarefied air. "We don't move an inch; shall we descend?"

"But the storm?" said the Doctor, also uneasy.

"If you dread being dragged away by the wind, it seems to me there is no other course to pursue."

"Perhaps the storm will not burst to-night," said Joe, "the clouds are very high."

"It is that very reason which makes me hesitate to pass through them. We would have to ascend to an extreme height, to lose sight of the earth, and all night long we would be unable to know whether we advanced at all, or which way we went if we did so."

"Do you decide, my dear Samuel; time presses."

"It is very annoying that the wind should have fallen," said Joe; "it would have taken us far from the storm."

"That is indeed to be regretted, my friends, for these clouds are a source of danger to us. They enclose opposing currents, which might entwine us in their vortex, and lightnings capable of setting us on fire; on the other hand, the force of the squall might precipitate us to the earth, if we cast anchor on the top of some tree."

"What, then, is to be done?"

"We must keep the 'Victoria' in a middle zone, between the perils of earth and heaven. We have plenty of water for the furnace, and our two hundred pounds of ballast are untouched; in case of need I shall make use of them."

"We will watch with you," said Dick.

"No, no, friends. Put the provisions under shelter, and lie down. I will wake you if it should be necessary."

"But had not you better take some rest yourself, sir, while nothing threatens?"

"No, thank you, my lad, I prefer watching. We are quite motionless, and if circumstances don't change, to-morrow we shall be exactly where we are."

"Good evening, sir."

"Good-night, if it is possible."

Kennedy and Joe stretched themselves under their rugs, and the Doctor was left alone to watch for the expected storm.

The dome of clouds began insensibly to lower, and the darkness became profound; the black vault closed round the earth as if it would crush it. Suddenly a violent flash of lightning, quick and incisive, shot through the darkness, nor had the rent made by it in the clouds closed ere a frightful peal of thunder shook the depths of the heavens.

"Look out!" cried the Doctor.

The two sleepers, awakened by the dreadful noise, placed themselves at his orders.

"Shall we descend?" said Kennedy.

"No, the balloon could not bear it. We must ascend before these clouds resolve themselves into water, and the winds are unchained."

And he drove the flame of the furnace briskly through the spirals of the serpentine.

Tropical storms are developed with a rapidity

In the Hurricane.

only comparable with their violence. A second flash tore through the night, and was followed by twenty others instantly. The whole heavens were

a mass of electric sparks, which crackled under the large drops of rain.

"We are too late," said the Doctor. "We must travel through a belt of fire with our balloon full of inflammable air!"

"To the ground! to the ground!" Kennedy kept replying.

"This risk of being struck by the lightning would be almost the same, and we should quickly be torn to pieces on the branches of the trees."

"Let us ascend, sir! Let us ascend!"

"Quick!—quicker still!"

In that part of Africa, during the equatorial storms, it is not an uncommon thing to count from thirty to thirty-five flashes of lightning in a minute. The heavens are literally on fire, and the peals of thunder incessant.

The wind broke out with frightful violence in that blazing atmosphere; it twisted and whirled about the fiery clouds; it sounded like the blast of some enormous ventilator, which forced the fires of heaven into such terrible activity.

Fergusson kept his furnace at its greatest heat, the balloon expanded and ascended; on his knees, in the centre of the car, Kennedy held down the curtains of the tent.

The balloon whirled round with rapidity enough to produce vertigo, and the travellers underwent the most frightful oscillations. Great cavities could be seen in the covering of the balloon, in which the

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wind engulphed itself with tremendous violence. Hail of immense size, preceded by a tumultuous noise, tore through the atmosphere and rattled on the "Victoria." Still the balloon ascended—the lightnings flashing in flaming tangents from its circumference. It was in the very midst of fire!

"Heaven guard us!" cried the Doctor; "we are in its hands, and Heaven alone can save us. Be prepared for every event, even for catching fire; perhaps our fall may not be rapid."

The Doctor's voice with difficulty reached his companions' ears, but they could see his face unmoved amid the lightning, as it leapt about the netting of the balloon.

The balloon whirled about, and spun round and round, but still it mounted upwards. At the end of a quarter of an hour it had left behind it the zone of storm-clouds, and the electric disturbances and flashes now took place beneath it, like a vast crown of fireworks suspended from the car.

Thence, it was one of the most magnificent spectacles which Nature could exhibit to man. Below—the storm. Above—the starlit heavens, tranquil, silent, impassible, whence the moon threw her peaceful rays over the angry clouds.

The Doctor looked at the barometer; it showed an elevation of twelve thousand feet.

It was eleven o'clock at night.

"Thanks to Heaven!" said he, "all danger is passed; it will suffice to keep at this height."

"It was dreadful," said Kennedy.

"Not bad," said Joe; "it diversified the voyage, and I'm not sorry to have seen a storm up in the air. It's a pretty sight!"

CHAPTER X.

The Mountains of the Moon.—A Sea of Verdure.—Cast Anchor.—Towed by an Elephant; its Death.—Field Cookery.—The Picnic.—A Night on Land.

AT six on the morning of Monday, the sun rose above the horizon; the clouds dispersed, and a pleasant wind refreshed the first hours of the morning. The earth, all perfumed, reappeared to the eyes of our travellers.

The balloon, turning in its position in the midst of opposing currents, had scarcely made any leeway—to use a nautical expression—and the Doctor, allowing the gas to contract, descended, in order to meet with a breeze in a more northern direction.

For a long time his attempts to find one were in vain; the wind bore him westward, even in sight of the celebrated Mountains of the Moon, which are ranged in a semi-circle round the top of Lake Tanganayika; their ridges, but little serrated, stood boldly out on the bluish horizon; it might have been called a natural fortification, impassable to the explorers of the centre of Africa; some isolated cones had their summits covered with eternal snows.

"Here we are," said the Doctor, "in an unex-

plored country. Burton pushed well forward into the west, but he was never able to reach these mountains. He has even denied their existence, while Speke, his companion, affirms it; he pretends that they have birth only in the imagination of the latter; but for us, doubt is no longer possible."

"Are we going to cross over them?" asked Kennedy.

"Not at all, please heaven! I hope to find a favourable wind which will lead me to the equator. I will even wait, if it is necessary, and the 'Victoria' will cast anchor, like a ship detained by contrary winds."

The Doctor's prognostications were not long in being realised. After trying different altitudes, at last the "Victoria" bore off to the north-east at moderate speed.

"We are in a capital direction," said the Doctor, looking at the compass, "and scarcely two hundred feet from the ground, all happy circumstances in assisting us to explore these new regions. Speke, when he made the discovery of Lake Ukéréoué, went up northward farther east than we are—in fact, due north from Kazeh."

"Shall we be a long time going this way?"

"Perhaps. Our object is to reach a point by the side of the sources of the Nile, and we have more than six hundred miles to travel over, ere we reach the extreme limits attained by the explorers who have come from the north."

"And without ever touching the earth?" said Joe. "I am thinking of stretching my legs."

"And you shall, truly. We must also be careful of our provisions, and as we go along, Dick, my boy, you shall keep us supplied with fresh meat."

"As soon as you like, friend Samuel."

"We shall also have to renew our reserve of water; who knows but we may be blown out of our course into the arid desert? We cannot take too many precautions."

At mid-day the "Victoria" was in longitude 29° 15′, latitude 3° 15′. They had just passed over the village of Uyofu, the last northern part of Unyamwesi, by the side of Lake Ukéréoué, which, as yet, they could not see.

The natives who people the country closer to the equator seem to be more civilised, and are governed by absolute monarchs, whose despotic sway is unlimited. The most important of these forms the province of Karagwah.

Our three travellers agreed that they would "make land," as the sailors say, the first time they found a good place for the purpose. They were going to make a rather prolonged halt, and to submit the balloon to a careful examination.

The furnace was lowered, and the anchors thrown from the car began very soon to trail through the high grass of an immense prairie. At the height they had left it appeared covered with a close green turf, but in reality the grass grew seven or eight

feet high. The "Victoria" skimmed over, without bending a stalk of it, like some gigantic butterfly. Not an obstacle was to be seen; everywhere an ocean of verdure, without a single break.

"We may run a long time in this style," said Kennedy. "I don't see a tree anywhere to hook on to; my hunting seems knocked on the head."

"Wait a bit, Dick. You couldn't have any sport in that grass, which is higher than you are; we shall not be long finding a more favourable spot."

Such a mode of progress was charming, a veritable navigation over that sea of almost transparent green, which the breath of the wind rippled with graceful waves. The anchors, plunged in this lake of flowers, traced a furrow which closed behind them, like the sea in the wake of a vessel.

All at once the balloon experienced a violent shock; the anchor had doubtless caught some fissure of the rock hidden under this gigantic herbage.

"We are caught," said Joe.

"All right; then throw over the ladder," said the hunter.

Hardly had he spoken the words, when a shrill cry rang through the air, and the following exclamations broke from the lips of our travellers:—

"What's that?"

"What a strange cry!"

"We are off again!"

"The anchor has got free!"

"Not it; it is holding on still," said Joe, who was hauling at the rope.

"It is the rock that is moving!"

A great disturbance was taking place in the grass, and speedily a long and sinuous form rose above the verdure.

"A serpent!" cried Joe.

"A serpent!" cried Kennedy, seizing his rifle.

"No, no," said the Doctor, "it is the trunk of an elephant."

"An elephant, Samuel?" and Kennedy shouldered his rifle.

"Wait, Dick, wait!"

"Hold hard, the animal is towing us!"

"And the right way, Joe; the right way!"

The elephant got over the ground quickly, and soon got to a clearing, where he could be seen altogether. By his immense height the Doctor recognised him as a male of a magnificent species; his tusks were splendidly curved, pure white, and about eight feet long, and between them the flukes of the anchor were firmly fixed.

The animal vainly endeavoured to rid himself of the rope by which he was made fast to the car.

"Get along, old boy!" cried Joe, in great glee. "Here's the newest thing out in travelling. No horses for us—an elephant's the ticket."

"But where is he leading us?" asked Kennedy, shaking his rifle, which he was itching to fire.

Towed by an Elephant.

"The very way we want to go, my dear Dick. Have a little patience."

"Go it, go it!" cried Joe.

The animal took to a rapid gallop, throwing his trunk right and left, and in his leaps giving the most violent shocks to the car, where the Doctor stood, axe in hand, ready to cut the rope if necessary.

"But," said he, "we won't lose our anchor till the last moment."

For an hour and a half the elephant kept on his way without appearing fatigued, for these enormous pachyderms can make long stretches, and from one day to another are found at considerable distances; much as whales are at sea, whom they match in size and rapidity.

"In fact," said Joe, "it is a whale we have harpooned, and we have only to imitate the manœuvres of the whale-fishers."

But a change in the character of the ground compelled the Doctor to modify his style of locomotion. A thick wood of large trees appeared to the north of the prairie, about three miles off, and it therefore became necessary that the balloon should be separated from its conductor.

To Kennedy was entrusted the task of stopping the elephant in his course. He raised his rifle, but his position was not favourable for hitting the animal with success. A first ball, fired at its skull, flattened on it as if it had struck a sheet of iron,

without apparently inconveniencing the animal, but the noise of the discharge made him quicken his pace, which now was equal to that of a horse at a gallop.

"The devil!" muttered Kennedy.

"What a hard skull!" cried Joe.

"Let's see what a conical ball will do behind his shoulder," said Dick, and, reloading his rifle with care, he fired.

The animal uttered a terrible cry, but kept up his pace.

"Stop, sir," said Joe, catching up a double-barrel, "I must come to your assistance, or we will never see the end of this;" and two balls were lodged in the brute's flanks.

The elephant stopped and raised his trunk, then again at full speed took his course for the wood. His immense head began to hang down, and the blood to flow freely from his wounds.

"Let us keep up our fire, Mr. Dick."

"And a rapid fire, too," said the Doctor. "We are not much more than a hundred feet from the wood."

Ten shots more were heard; the elephant gave a frightful leap, the car and the balloon cracked as if everything was smashed, and the shock jerked the axe out of the Doctor's hands on to the ground.

The situation was now most perilous; the cable of the anchor, strongly fastened, could neither be detached nor cut through by the knives of the

travellers. The balloon was rapidly approaching the wood, when, at the moment, the brute raised its head, Dick, seizing the opportunity, sent a bullet into its eye. It stopped, hesitated, its knees began to give way, and its side was presented to the aim of the hunter.

"Here goes for your heart!" he cried, as he discharged his rifle for the last time.

The elephant uttered a roar of rage and agony, straightened himself again for an instant, turning his trunk from side to side, and then fell with all his weight on one of his tusks, which broke clean off. He was dead.

"His tusk is broken!" cried Kennedy; "ivory that would fetch five-and-twenty guineas a hundredweight in England."

"What's the use of growling, my dear Dick? We are not ivory merchants, nor did we come here to make our fortunes."

Joe examined the anchor; it was yet firmly held by the tusk which had not been broken. The Doctor and Dick leaped to the ground, while the balloon, half inflated, floated over the body of the animal.

"What a magnificent beast!" cried Kennedy. "I never came across so large a one in India."

"There is nothing astonishing in that, my dear Dick; the elephants of Central Africa are the finest in the world. The Anderssons and Cummings have so hunted them near the Cape that they have

The Dead Elephant.

emigrated to the equator, where we shall doubtless find them in numerous herds."

"Meanwhile," said Joe, "I hope that we shall taste a bit of this fellow; I'll be bound I'll provide a very succulent dinner from him. If Mr. Kennedy will go shooting for an hour or two, and Mr. Samuel will inspect the 'Victoria,' I will during the time look after the cooking."

"A capital plan," said the Doctor. "Follow your humour, Joe."

"As for me, I shall avail myself of the two hours' liberty Joe has granted me."

"Off with you then; but be prudent, and don't go too far away."

"Make your mind easy." And Dick, armed with his double-barrel, plunged into the wood.

Joe looked after his particular share of the work. First of all he dug a hole in the ground about two feet deep; this he filled with the dry branches with which the ground was covered, and having filled it, he dragged a great log, two feet thick, on to the top, and set fire to the lot.

He next proceeded to the body of the elephant, which had fallen scarcely sixty feet from the wood, and very cleverly cut off the trunk, which measured nearly two feet thick at its junction with the head. Choosing the most delicate part of it, he added to that one of the broad and spongy feet of the animal, thus selecting the very best morsels, as he would have done the hump of a buffalo, the paw of a bear, or the head of a wild boar.

When the log of wood was completely consumed, the hole, cleared of ashes and charcoal, was excessively hot, and in this improvised oven he placed the pieces of elephant's flesh, carefully wrapped in aromatic leaves; he then covered the whole with the hot ashes, placed another log on the top of all, and when that was fairly burnt down, the meat was cooked to a turn.

Joe then withdrew the dinner from the oven, and placed the appetising meal upon some green leaves in the centre of an exquisite piece of greensward, brought biscuits, brandy, and coffee, and drew some cool and limpid water from a neighbouring brook. Joe was delighted with the appearance of the feast he had prepared, but he thought at the same time that there would be more pleasure in eating it.

"To travel without danger," said he to himself, "to have regular meals, and to live in a hammock, as I may say—I don't see what more there is to wish for. But I wish Mr. Kennedy would come."

The Doctor had employed the time in a thorough examination of the balloon, which did not appear to have sustained any damage from the storm; the taffeta and gutta-percha had stood it wonderfully. On taking the actual height of the ground, and calculating the buoyancy of the balloon, he saw with satisfaction that there was the same quantity of hydrogen. The covering remained perfectly impermeable.

It was only five days since our travellers quitted

Zanzibar. The pemmican had not yet been touched, the provisions of biscuit and meat would suffice for a long voyage; there was only the supply of water to renew. The pipes and the serpentine appeared to be perfect; thanks to the articulations of india-rubber, they had given with every oscillation of the balloon.

Having finished his examination, the Doctor occupied himself in putting his notes in order. He then made a very successful sketch of the surrounding country, with the prairie stretching out of sight, and the balloon floating over the body of the monstrous elephant.

At the end of two hours Kennedy returned with a string of fat partridges, and a sort of gemsbok, belonging to the fleetest of the antelopes of the African Continent, and Joe undertook the preparation of this increase of provisions.

"Dinner is ready!" cried Joe, presently, in his most persuasive tone.

Our three travellers had only to seat themselves on the lawn-like grass. The trunk and foot of the elephant were declared exquisite. They drank to Old England, as, indeed, they never failed to do; and for the first time in that charming country, the perfume of delicious havannas perfumed the air.

Kennedy ate, drank, and talked enough for four; he was intoxicated, and seriously proposed to the Doctor to establish themselves in the forest, to build a hut of boughs and leaves, and to commence

the dynasty of the African Robinson Crusoes! Nothing more came of it, however, except that Joe proposed to fill the part of Friday.

The country seemed so tranquil, so deserted, that the Doctor determined to pass the night on the earth.

Joe built up a circle of fire, an indispensable barricade against wild beasts—the hyenas, congars, and jackals, which, attracted by the smell of the elephant's flesh, prowled round the neighbourhood. Kennedy had to discharge his rifle several times amongst the boldest of these visitors; but at last the night passed without any incident to annoy them.

CHAPTER XI.

Karagwah.—Lake Ukéréoué.—A Night on an Island.—The Equator.—Crossing the Lake.—The Cascades.—View of the Country.—Source of the Nile.—The Island of Benga—Debono's Initials.—The English Flag.

ON the morrow, as early as five o'clock, began the preparations for departure. Joe, with the axe which he had fortunately recovered, broke off the elephant's tusk, and the "Victoria," once more at liberty, bore the travellers towards the north-east at eighteen miles an hour.

The Doctor had carefully noted their position from the height of the stars on the previous night. They were 2° 40′ of latitude south of the equator, or 160 geographical miles.

They passed over numerous villages without paying any attention to the cries provoked by the apparition of the "Victoria;" they crossed the slopes of Rubemhé, scarcely less rugged than the summits of Ousagara; and, later on, met at Tenga the first spurs of the chain of Karagwah, which, according to the Doctor, was itself an offshoot from the Mountains of the Moon.

The old legend which made these mountains the cradle of the Nile was not far from the truth, since

they confine Lake Ukéréoué, the presumed reservoir of the waters of the great river.

From Kafuro, a large district much frequented by the country traders, the Doctor at last caught sight of this much sought for lake on the horizon, which Speke caught a glimpse of on the 3rd of August, 1858.

Fergusson was sensibly touched. He had almost reached one of the principal objects of his exploration, and with his glass to his eye he did not lose sight of one corner of that mysterious country.

What met his gaze?

Beneath him a land exhausted and impoverished, with but a few of the slopes of the ravines somewhat cultivated; here and there rising into cones of no great height, but becoming level as it neared the lake. The rice fields had given way to fields of barley; nothing else seemed cultivated but the plantain, from which is made a sort of coarse wine, and, growing wild, was the "mwani," which is used as coffee. Some fifty huts, half hidden under a thatch of flowers, constituted the capital of Karagwah.

They could easily see the wonder-struck faces of the inhabitants, who were by no means bad-looking, and with skins of a yellowish-brown. Women of incredible corpulence crawled about in the plantations, and the Doctor thoroughly astonished his companions by telling them that all this

embonpoint—highly valued—was produced by a compulsory regimen of curdled milk.

At noon the "Victoria" was in 1° 45′ south latitude; at one the wind drove her over the lake.

This lake has been named Nyanza* Victoria by Captain Speke. In this place it might measure ninety miles in breadth. At its southern extremity Speke found a group of islands, which he named the Archipelago of Bengal.

He continued his observations as far as Muanza, on the eastern side, where he was well received by the Sultan. He made a survey of that part of the lake, but he was unable to procure a boat, either to cross the lake or to visit the large island of Ukéréoué, which is very populous, and governed by three Sultans. It is a peninsula at low water.

The "Victoria" came over the lake at its northern extremity, to the Doctor's great regret, for he would have liked to determine the formation of its lower shores. The shores he saw bristled with thorny bushes and impassable brush, but were literally hidden by myriads of mosquitoes, of a clear brown colour, which rendered the country uninhabitable to man. Immense herds of hippopotami wallowed in the forests of reeds and sedges, or plunged into the whitened waters of the lake.

The lake itself, seen from on high, stretches away towards the western horizon like a sea, and so great is the distance between its shores that

* *Nyanza* signifies "lake."

communications have never been established between them, due, in some measure perhaps, to the fierce and frequent tempests of which its elevated and unsheltered basin renders it the scene.

The Doctor found some difficulty in guiding the balloon. He feared being borne eastwards, but he luckily lighted on a current which took him due north, and at six o'clock in the evening the "Victoria" was made fast to a little desert island, twenty miles from the coast, and in latitude 0° 30′, longitude 32° 52′.

Our travellers had managed to hook on to a tree, and the wind having gone down towards evening, they rested quietly at anchor. They dared not dream of landing, for here, as along the shores of the Nyanza, legions of mosquitoes covered the earth like a thick cloud. Joe, indeed, tried it, but he soon and quickly ascended, covered with stings, which, he said, did not trouble him, as he might have expected mosquitoes to know no better.

Nevertheless the Doctor let out as much rope as he could, in order to escape from these merciless insects, which kept rising now and again with a murmur that made them quite uncomfortable. The Doctor knew the height of the lake above the level of the sea to be 3,750 feet.

"Here we are on an island all to ourselves," said Joe, scratching himself hard enough to rasp his fingers off.

"Yes," said Kennedy, "and it is not so big that

we could not soon make the tour of it. I have not seen a living thing on it except these amiable insects."

"These islands with which the lake is dotted," said the Doctor, "are really submerged hills, and we should think ourselves lucky to have found shelter on one, for the shores are inhabited by ferocious savages. So go to sleep, we shall have a peaceful night."

"Are not you going to sleep also?"

"No! I could not close an eye; my thoughts drive away slumber. To-morrow, if the wind is favourable, we shall travel due north, and we will perhaps discover the source of the Nile—that secret which till now has remained impenetrable. So near the source of that great river I could not sleep."

Kennedy and Joe, whom scientific preoccupations did not in the least affect, were not long in falling soundly asleep, under the watchful care of the Doctor.

On Wednesday, the 23rd of April, the "Victoria" got under weigh at four o'clock in the morning, under a dull greyish sky; the night seemed to quit the waters of the lake with difficulty, and everything was enshrouded in a thick fog, but a strong breeze sprang up and quickly dissipated the mist. The "Victoria" balanced for some minutes in different directions, but at last took a course directly north.

The Doctor clapped his hands with joy.

"This is the right road!" he cried. "To-day or never we shall see the Nile! We are now crossing the equator and entering into another hemisphere."

"Ah! sir," said Joe, "you think then that we are crossing the equator?"

"At this very moment, my lad!"

"Then I think we ought to wet it, sir, without loss of time!"

"A glass of grog by all means!" cried the Doctor, laughing. "Your way of understanding cosmography, Joe, is by no means a bad one."

And this was how they celebrated "crossing the line" on board the "Victoria."

The balloon was making rapid way. On the west they could perceive the low and indented shore; at the bottom the elevated plateaux of Uganda and Usoga. The speed of the wind had become excessive—nearly thirty miles an hour. The waters of the Nyanza rapidly rose and rushed along in foaming billows, like the waves of the sea. By their height, and the distance between swell and swell, the Doctor was able to decide that the depth of the lake was exceedingly great. One or two boats, they just caught a glimpse of during their rapid voyage.

"This lake," said the Doctor, "is evidently, from its elevated position, the natural reservoir of the rivers of Eastern Africa. It gets back in rain all the water carried off by its effluents or by evapora-

tion. I feel certain that the Nile must take its rise here!"

"We shall soon see!" replied Kennedy.

About nine o'clock they neared the western shore, which appeared deserted and covered with dense woods. The wind then bore them a little to the eastward, and they could see the other shore of the lake, which bent in such a manner that it terminated in a wide and open angle, in 2° 40′ north latitude. Whilst managing the balloon the Doctor never ceased to examine the country with the most eager scrutiny.

"Look!" he cried, "look my friends! The stories of the Arabs were true! They spoke of a river by which Lake Ukéréoué discharged towards the north, and this river exists, we are descending it, and it flows with a rapidity as great as our own. Every drop of water that runs under our feet is rushing to meet the waters of the Mediterranean. It is the Nile!"

"It is the Nile!" cried Kennedy, catching the Doctor's enthusiasm.

"Long live the Nile!" cried Joe, who, for that matter, would have cried long live anything when he was in a good humour.

Enormous rocks here and there blocked up the course of this mysterious river. The waters foamed along, forming rapids and cataracts, which confirmed the Doctor in his previous belief. The surrounding mountains showed on all sides num-

berless torrents, flashing and foaming as they fell, —the eye counted them by hundreds. Everywhere from the earth sprang slender threads of scattering waters, crossing, mingling, emulating each other in speed, but all rushing into this new-born stream, which was to become a river after receiving them.

"Behold the Nile!" cried the Doctor, with an air of conviction. "Like the origin of its waters, its very name has perplexed the wise men since all time—they have derived it from the Greek, from the Coptic, from the Sanscrit; but what does all that matter, now that it has surrendered the secret of its source!" *

"But," said Kennedy, "how can you be sure of the identity of this river with that which travellers from the North have explored?"

"We shall have proofs certain, unanswerable, infallible—if the wind will only last favourable for another hour."

The mountains parted, giving place to numerous villages, to cultivated fields of sesame, of dourrah, and of sugar-canes.

The tribes of these plains showed themselves disturbed and hostile; anger and not adoration was the passion they displayed; they saw only the advent of strangers, not of gods. It seemed as if

* A Byzantine sage saw in "Neilos" an arithmetical name. N represented 50; E, 5; I, 10; L, 30; O, 70; S, 200: the whole amounting to the number of days in a year.

they felt that those who had traced up the Nile to its source had robbed them.

The "Victoria" had to be kept out of musket-shot.

"It won't be an easy matter to alight here," said the Scot.

"So much the worse for the natives," said Joe. "They'll lose the charm of our conversation."

"Come what may, I must descend," said the Doctor, "if it is only for a quarter of an hour; without doing so, I cannot verify the results of our exploration."

"Is it indispensable, then?"

"Indispensable; and descend we shall, if we have to fight for it."

"Suits *me* exactly," said Kennedy, patting his rifle.

"As soon as you like, sir," said Joe, getting ready for the fight.

"It will not be the first time," said the Doctor, "that scientific researches have been made sword in hand, so to speak. I recollect a similar thing happening in the mountains of Spain to a French *savant*, who went there to measure the terrestrial meridian."

"Take it easy, Samuel, and depend on your two body-guards."

"Are we there, sir?"

"Not yet; we must rise higher, too, in order to seize the exact configuration of the country."

The hydrogen expanded, and in less than ten minutes the "Victoria" had reached a height of 2,500 feet above the earth. Thence could be distinguished an inextricable network of streams which the river received into its bed, most of them coming from the west, flowing between numberless little hills and through a fertile country.

"We are not ninety miles from Gondokoro," said the Doctor, pointing to the map, "and less than five miles from the highest point reached by travellers from the north; let us descend with proper precaution."

The "Victoria" dropped down more than 2,000 feet.

"Now, friends, be ready for all chances."

"We are ready," replied Dick and Joe.

"All right."

Scarce one hundred feet from the ground, the "Victoria" floated along, following the course of the river.

At this place the Nile was three hundred feet across, and the natives were seen rushing about in the numerous villages which covered its banks. At the second degree it formed a fall ten feet in height, and consequently impassable.

"That is the cascade pointed out by Debono," cried the Doctor.

The river now widened considerably, and was covered with little islands, which the Doctor devoured with his eyes; he seemed to be looking

The last Cataract of the Nile.

for some sign which he expected to meet, but had not yet seen.

Some negroes had pushed off in a boat, which they kept afloat exactly under the balloon; Kennedy gave them a shot, which, though it did not reach them, sent them back to the shore in quick time.

"Pleasant voyage to you," cried Joe; "if I were you, I would not come back near the monster that darts lightning whenever he likes."

Suddenly, in great excitement, the Doctor seized his glass, and directed it at an island situated in the middle of the river.

"Four trees!" he cried; "look! down there!"

And sure enough, four isolated trees raised their heads at the end of it.

"It is the island of Benga! It is really the island!" he added.

"What then?" asked Dick.

"We shall descend there, please heaven."

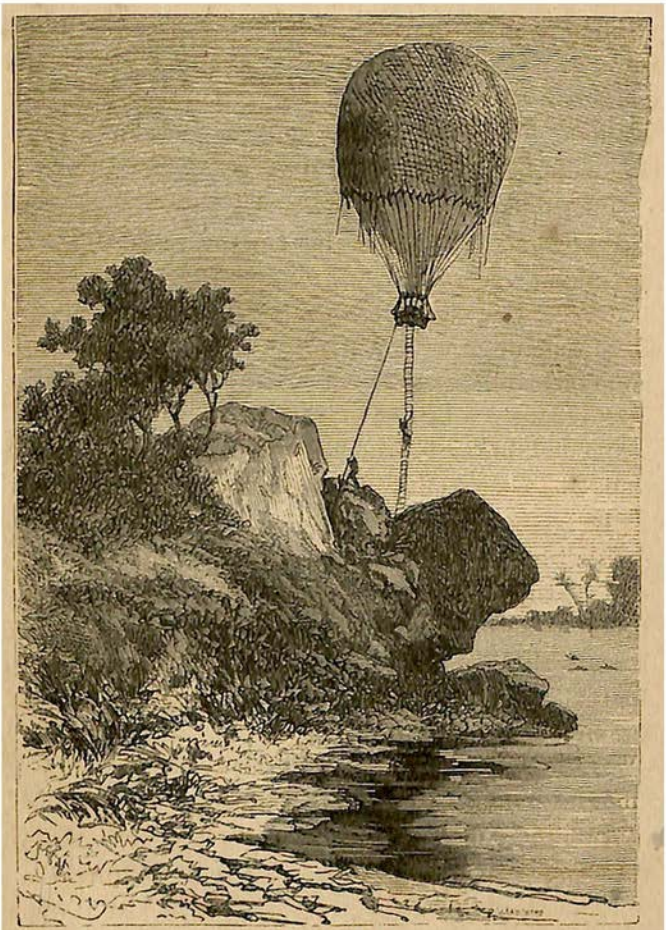
"But it seems to be inhabited, sir."

"Joe is right; if I do not deceive myself, I can see a gathering of about twenty natives."

"We must put them to flight—that won't be difficult," said the Doctor.

"Be it as you say," replied Dick.

The sun was in the zenith. The "Victoria" rapidly approached the island. The negroes, belonging to the tribe of Makado, uttered the most piercing cries. One of them waved his bark hat



The Island of Benga.

in the air; this was enough for Kennedy, who fired, and sent the hat flying in chips.

Then was a general rout. The natives dived into the river, and swam across; from both banks came a hail of bullets and a rain of arrows, but without endangering the balloon, whose anchor had caught in a fissure of the rock.

Joe glided to the ground.

"The ladder!" cried the Doctor. "Follow me, Kennedy."

"What are you going to do?"

"Come on, I want a witness."

"Here am I, then."

"Joe, keep a bright look-out."

"All right, sir; I'll answer for everything."

"Now then, Dick!" cried the Doctor, as soon as he landed.

He dragged his companion to a group of rocks which reared their heads at the end of the island; there he searched for some time, ferreting in the bushes till his hands were torn and covered with blood. On a sudden, he caught Dick's arm in a grasp like a vice.

"Look there!" he cried.

"Letters, by Jove!" said Kennedy.

And there, indeed, appeared on the face of the rock two clearly-cut letters. He read distinctly—

A. D.

"A. D.," replied the Doctor; "Andrea Debono!

the very signature itself of the traveller who has farthest ascended the Nile!"

"There's no getting over it, friend Samuel."

"Are you now convinced?"

"It is the Nile; there can be no doubt about it."

The Doctor looked a last time at those precious initials, of which he took the exact shape and size.

"And now," said he, "back to the balloon."

"Look sharp! some of these niggers are getting ready to cross the river!"

"That's of no importance; only let the wind keep fair for the north, in a few hours we will reach Gondokoro, and shake hands with our countrymen."

Ten minutes after, the "Victoria" rose majestically, and the excited and delighted Doctor, in token of his success, waved from the car the Union Jack of Old England.

CHAPTER XII.

The Nile.—The Trembling Mountain.—Arab Legends.—The Nyam-Nyams.—Joe's Reflections.—The "Victoria" progresses.—Aeronautical Ascensions.—Madame Blanchard.

"WHICH way are we steering?" asked Dick, seeing his friend looking at the compass.

"Nor'-nor'-west."

"The devil—that is not north!"

"No, Dick; and I fear we shall scarcely be able to reach Gondokoro. I regret it; but as we have added the explorations of the east to those of the north we must not complain."

The "Victoria" was gradually leaving the Nile.

"One more look," cried the Doctor, "at that impassable latitude, which the most intrepid travellers have never been able to cross. There are, indeed, those intractable tribes mentioned by Petherick, Miani, and Lejean, to whom we are indebted for the best works on the Upper Nile."

"Then," asked Kennedy, "our discoveries agree with the presentiments of science?"

"Agree thoroughly. The sources of the White River, of the Bahr-el-Abiad, immerge into a lake as large as a sea. It is thence it derives its birth.

Poetry loses it there, no doubt; it likes to suppose for this King of Rivers a celestial origin. The ancients called it by the name of Ocean, and were not far from believing that it flowed directly from the sun! But we must repent, and accept from time to time what science teaches us about it. There may not perhaps always be wise men, but there will always be poets."

"I can see more cataracts," said Joe.

"These are the cataracts of Makedo, in the third degree of latitude. Nothing could be more exact! Have we not been able for some hours to follow the course of the Nile?"

"And below us, there," said Dick, "I can see the summit of a mountain!"

"It is Mount Logweg, the Shaking Mountain of the Arabs. All that country has been visited by Debono, who traversed it under the name of Latif Effendi. The neighbouring tribes of the Nile carry on a war of extermination against each other. You may easily guess what perils he had to encounter."

The wind now bore the "Victoria" towards the north-west, and in order to avoid Mount Logweg it was necessary to find a current with a different inclination.

"My friends," said the Doctor, addressing his two companions, "here truly commences our voyage across Africa. Hitherto we have only followed the traces of our predecessors. Henceforth

we launch into the Unknown. Will this shake your courage?"

"Never!" cried Dick and Joe in one voice.

"Let us start then, and may heaven protect us!"

At ten at night, after travelling over ravines,

forests, and scattered villages, our travellers arrived at the flanks of the Shaking Mountain, beside whose gentle slopes they pursued their way.

On that memorable day—the 23rd of April—they had, during fifteen hours, travelled with the help

of a strong wind, a distance of more than 315 miles. But this last part of the voyage had left a sad impression: a complete silence reigned in the car.

Was the Doctor absorbed in his discoveries? Did his two companions think of that passage through the midst of unknown regions?

Such thoughts were doubtless mingled with more vivid remembrances of England, and of distant friends. Joe alone showed a careless philosophy, taking everything for granted; but he respected the silence of his master and his friend.

At ten, then, the "Victoria" anchored by the side of the Shaking Mountain;* after a substantial repast they all slept successively under the guard of one of them.

On the morning, waking brought calmer thoughts. The weather was perfect, the wind blew in the right direction, and a good breakfast, rendered gay by Joe's good humour, put them in excellent spirits.

The country explored up to this moment is immense. It is confined between the Mountains of the Moon and those of Darfour—about the size of Europe.

"We shall doubtless cross what is supposed to be the kingdom of Usoga," said the Doctor. "Geographers have pretended that there exists in the centre of Africa a vast depression—an immense

* Tradition asserts that it trembles as soon as a Mussulman places his foot upon it.

central lake. We shall see if there is any appearance of truth in such a supposition."

"How did they come to have such an idea?"

"From the reports of the Arabs. These gentry are great story-tellers, too much so, perhaps. Some travellers arrived at Kazeh, on the Great Lakes, have seen slaves who have been brought from central countries, have interrogated them about their native place, have made into documents all the stories they had heard, and proceeded to deduce systems from them. There is always something true at the bottom, however, and you will see that we are not deceived as to the source of the Nile."

"I feel certain about that," said Kennedy.

"It is by means of the documents I have mentioned that attempts at maps have been made, but I intend to follow our route on one of them and rectify it with care."

"Is all that region inhabited?" asked Joe.

"Yes, and badly inhabited too!"

"I don't doubt it!"

"These scattered tribes are comprised under the general denomination of Nyam-Nyam; but this name is a case of onomatopœia, for it reproduces the sound of mastication."

"Perfectly," said Joe; "Nyam-Nyam!"

"Ah! Joe, if you were the immediate cause of that onomatopœia, you wouldn't find it so perfect!"

"What do you mean, sir?"

"That these people are all considered cannibals."

"Is that certain?"

"Very certain indeed. It has also been said that the natives were provided with tails, like simple quadrupeds, but it is now known that these tails belonged to the skins of the beasts with which they are clothed."

"So much the worse; I should think they would find tails useful in driving away the mosquitoes."

"Very likely, Joe; but that story must be banished to the region of fable, like the one of some of the people having the heads of dogs."

"Heads of dogs! That would be very convenient for barking, and also if one was given to cannibalism."

"What is unfortunately true is the ferocity of these people; they are madly fond of human flesh, which they hunt for with the utmost avidity."

"I hope they won't put themselves out of the way on my account," said Joe.

"Let us hope not," said Dick.

"Excuse me, Mr. Dick, if ever I am to be eaten in a moment of scarcity I hope it will be for the benefit of you and my master. But to feed niggers! augh!"

"All right, Joe, that's understood; we shall count on you when the time comes."

"At your service, gentlemen!"

"Joe talks in that way," said the Doctor, "that we may take care of him and fatten him up well."

"Perhaps," said Joe; "man is such an egotistical animal!"

In the afternoon the heavens were obscured by a hot mist caused by the sun, so thick that terrestrial objects could scarcely be discovered, and fearing to strike against some unforeseen peak, at five in the evening the Doctor gave the signal to stop.

The night passed without incident, but it had been necessary to watch with redoubled vigilance on account of the profound obscurity. The monsoon blew with extreme violence during the early morning of the next day, the wind engulphed itself in the lower cavities of the balloon, so as almost to loosen the part by which the pipes for expanding the gas entered, so that they had to be secured by ropes, a feat that Joe performed very cleverly. It proved at the same time that the orifice of the balloon had remained hermetically closed.

"This has a double importance for us," said the Doctor. "We avoid in the first place the loss of the precious gas, and in the next escape setting it on fire if it leaks."

"That would be a vexatious incident."

"Should we be precipitated to the earth?" asked Dick.

"Precipitated! No. The gas would burn quietly, and we would gradually descend. Such an accident did happen to a Mrs. Blanchard, who set fire to her balloon in letting off fireworks, and she did

not fall, and would not have been killed, I daresay, if her balloon had not struck against a chimney and pitched her out."

"Let's hope nothing of the kind will happen to us," said Dick. "I've seen nothing dangerous in our voyage hitherto, and I don't see what is to hinder us from arriving safely at the end of it."

"No more do I, my dear Dick; accidents, besides, are always caused by the imprudence of aeronauts, or by the faulty construction of their balloons. After all, out of thousands of balloon ascents there have not been twenty fatal accidents; as a rule, starting and coming to earth again are the most dangerous processes, so in such cases we should bear in mind to neglect no precautions."

"It is dinner hour, gentlemen," said Joe. "We must be content with preserved meat and coffee, until Mr. Kennedy can find means to regale us with a nice bit of venison."

CHAPTER XIII.

Fig-palms.—Mammoth Trees.—The War Tree.—A winged Team.—Native Fights.—Massacres.—Supernatural Intervention.

THE wind became violent and irregular. The "Victoria" kept "tacking" in the air; blown sometimes to the north, sometimes to the south—a constant current could not be met with.

"We are doing a lot of travelling without getting on," said Kennedy, watching the frequent oscillations of the magnetic needle.

"We are not going less than thirty leagues an hour," said the Doctor. "Just look over and see how rapidly the ground disappears under our feet. Look! that forest appears as if it were about to precipitate itself on us."

"The forest has already become a clearing," said Dick.

"And the clearing a village," put in Joe, a minute later. "I can see the wonder-struck faces of the niggers."

"That is natural enough," said the Doctor. "The French peasants, when they first saw balloons, fired on them, thinking they were aerial monsters;

so there is nothing surprising in a native of Soudan opening his eyes rather widely at the sight of one."

"My faith," said Joe, as the "Victoria" passed over within a hundred feet of a little village, "if you will allow me, sir, I will throw down an empty bottle. If it lands safely they will make a god of it; and if it breaks they will turn each piece into a talisman."

So saying, he threw over a bottle, which was, of course, smashed into a thousand pieces, the natives darting into their huts and yelling with terror. A little farther on Kennedy cried out,—

"Look at that singular tree. It is one sort of tree below and another above!"

"A queer sort of country," said Joe; "where trees grow on the top of each other."

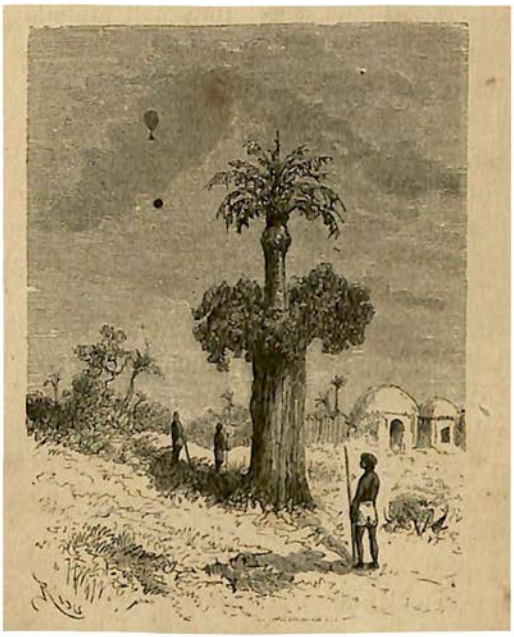
"It is simply the trunk of a fig tree," replied the Doctor, "on which there has been a little earth, and one fine day the wind has carried the seed of a palm tree there, where it has grown and flourished."

"A capital plan," said Joe, "which I shall import into England. It would do well in the London parks; without reckoning how it would increase the number of fruit trees, as every little market-gardener could grow as many as he liked, one on top of the other."

Whilst Joe was speaking, it had become necessary to ascend, in order to surmount a forest of

banian-trees, which grew to a height of more than three hundred feet.

"What magnificent trees!" cried Kennedy. "There are few finer sights than those presented by these venerable forests. Don't you think so, Samuel?"



"The height of these banian trees is certainly marvellous, my dear Dick; but it would not be thought at all surprising in the forests of the New World."

"What! there are loftier trees than these?"

"Decidedly; amongst those called the Mammoth trees. In California a cedar has been met with which reached the height of four hundred and fifty feet—higher than the Victoria tower at the Houses of Parliament, or even the great Pyramid itself. It measured a hundred and twenty feet in circumference at its base; and the concentric rings of its wood showed it to be four thousand years old."

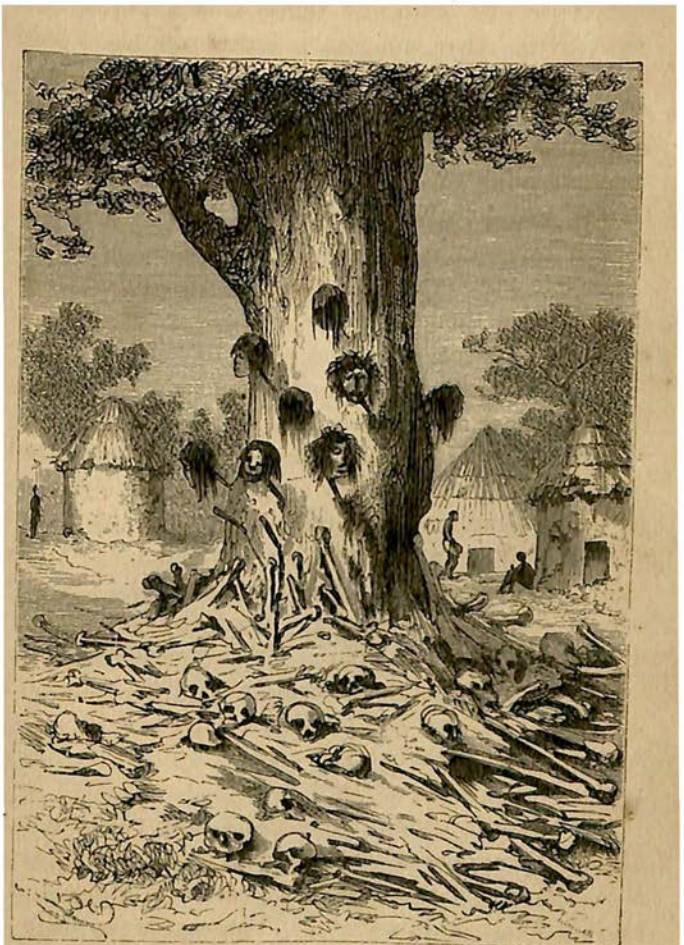
"That is not very surprising, sir. After living four thousand years, it would be hard if one did not grow rather tall."

But the forest was already passed, and under their feet a large number of huts appeared, built in a circle round an open space, in the centre of which grew a tree which was certainly unique. It was a gigantic sycamore, whose trunk was almost hidden under a heap of human bones; and in place of flowers, it bore a number of freshly-severed heads, held in their places by poignards driven into the bark.

"The war-tree of the cannibals," said the Doctor. "The North American Indian scalps his foe, the African cuts off his head."

"A matter of taste," said Joe.

The village and the tree with its gory heads had already disappeared, and another sight as repulsive was under their eyes; half-devoured bodies, skeletons falling into dust, and human limbs scattered on all sides—a feast for the hyenas and jackals.



The Cannibal's Tree.

"These are doubtless the bodies of criminals, who, as in Abyssinia, have been exposed to the attacks of wild beasts and devoured by them."

"It is not a more cruel plan than the gallows," said the Scot. "It is more disgusting perhaps, but that is all the difference."

"In Southern Africa," said the Doctor, "they fasten the criminal, with all his cattle, and very often his family, in his own hut, set fire to it and burn all of them together. I call that cruelty; though I agree with you, Kennedy, that if the gallows is less cruel, it is nevertheless barbarous."

Joe, whose sight was excellent, now pointed out some flocks of carnivorous birds which hovered about the horizon.

"They are eagles," cried Kennedy, who had been looking at them with the glass. "Magnificent birds, whose flight is as rapid as our own."

"Heaven protect us from their attacks!" said the Doctor. "They are more to be dreaded than wild beasts or savages."

"Bah!" said Dick, "a shot or two will scatter the lot."

"I should prefer, my dear Dick, to have no recourse to your address. The silk of our balloon would not withstand one blow of their beak; but, happily, these dangerous birds seem more frightened than attracted by our machine."

"I've got an idea," cried Joe, "and they are not

very plentiful nowadays. If we could only catch a team of live eagles, and fasten them to the car, they would pull us along famously."

"Such a thing has been seriously proposed," said the Doctor; "but I fear the animals would prove too restive."

"We should soon train them," said Joe. "Instead of bits we would drive them with blinkers, which would intercept their sight; so, with one eye uncovered, they would turn to the right or left; with both blinded, they would stop."

"Not bad, Joe; but I prefer a favourable wind to your team of eagles—it costs less to keep, and is a good deal more certain."

It was now mid-day. The "Victoria" had been for some time travelling at a more moderate pace, and the ground no longer flew past beneath them. Suddenly cries, hisses, and shouts reached the ears of the travellers, who leant over and saw, on the open plain below, an exciting spectacle. Two tribes had met in conflict and were fighting with fury, whilst arrows flew in clouds through the air. The combatants, eager to kill each other, had not observed the approach of the "Victoria." There were about three hundred of them mixed up in an inextricable mass, the greater number of them red with the blood of the wounded, in which they seemed to wallow,—altogether a hideous sight to behold. On the appearance of the balloon, there had been a momentary cessation; but now the

cries redoubled, and some arrows were shot at the car, one of which came so near that Joe caught it in his hand.

"Let us get out of range," cried the Doctor. "We must not be guilty of any imprudence."

The massacre continued, both sides using assagais and axes, and as soon as an enemy sank to earth his adversary instantly cut off his head; whilst the women mixed up in the struggle, collected together the bloody heads, and piled them up at each extremity of the battle-field, fighting amongst themselves for those hideous trophies.

"What a horrible scene!" said Kennedy, with profound disgust.

"They are murderous wretches," said Joe; "though, after all, they only require to be put in uniforms to be like regular soldiers."

"I have the greatest mind to interfere in their fight," said Dick, clutching his rifle.

"No, no!" cried the Doctor, quickly. "Why should we mix ourselves up in this quarrel? How do you know who is right or who is wrong, that you should play the part of Providence? Let us fly from this repulsive exhibition. If great generals could thus look down on the theatre of their exploits, they would perhaps end by losing their taste for bloodshed and conquest."

The chief of one of these savage tribes was remarkable for his athletic figure and Herculean

strength. With one hand he plunged his spear into the dense masses of his enemies, whilst wielding an axe in the other, with which he hewed them down. All at once he threw his assagai to a distance, threw himself on a wounded man, and at one blow cut off his arm, which he instantly carried to his mouth and began to tear with his teeth.

"Ah, the horrible beast!" cried Kennedy; "I can't stand this any longer." And the savage warrior, struck in the forehead by a bullet, fell dead.

His fall paralysed his warriors. His supernatural death, whilst it struck them with dismay, reanimated their enemies, and in a second the battle-field was deserted by half the combatants.

"Let us ascend and find a current that will take us away from this. I am heart-sick at the sight."

But they did not mount so swiftly as to prevent their seeing the victorious tribe throwing themselves on the dead and wounded, and quarrelling over the still warm flesh, which they greedily devoured. The "Victoria" rose; the cries of the maddened horde following her for a few minutes, till, at last, bearing away to the south, the scene of carnage and cannibalism was lost to view.

The ground had now become very rugged, with numerous watercourses, which flowed in an easterly direction, no doubt affluents of Lake Nu or the

river of Gazelles, of which M. Lejean has given such curious details. At night the "Victoria" anchored in longitude 27° and north latitude 4° 20′, after a voyage of 150 miles.

CHAPTER XIV.

Strange Noises.—A Night Attack.—Kennedy and Joe in the Tree.—Two Shots.—Help ! help !—An Answer in French.—A Prisoner; how to save him.

THE night was excessively dark; the Doctor had been unable to get a view of the country, and had anchored in a lofty tree, whose confused mass was scarcely visible in the darkness. As usual, he took the nine o'clock watch, and at midnight Dick relieved him.

"Watch sharply, Dick, keep an uncommonly bright look-out."

"Is there anything stirring?"

"No. Yet I fancy I have heard some vague noises beneath us. I don't know where the wind has brought us; and we can't be too prudent."

"You have heard the cries of some wild beast or other."

"No; it seemed to me quite different from that. At all events, rouse me at the least sign of danger."

"All right! Be easy."

After listening attentively for a last time, and hearing nothing, the Doctor drew his rug over him, and was soon asleep.

The sky was covered with thick clouds, and there was not a breath of wind. The "Victoria," held by a single anchor, did not even oscillate.

Kennedy, leaning on his elbow, watched the furnace, and looked out now and then into the still darkness towards the horizon, where, like all restless watchers, he fancied he saw some glimmerings of light. At one moment he even fancied he saw a gleam of light at two hundred yards' distance; but, if he did, it vanished instantly. It was doubtless one of those sensations of light which the eye imagines in the profoundest darkness. Satisfied it was nothing, Kennedy had almost relapsed into contemplation, when a sharp hiss fell on his ear. Was it the cry of an animal?—or some night-bird?—or did it issue from human lips?

Knowing well the importance of the event, Kennedy was on the point of awaking his companion, but he said to himself that in any case, whether men or beasts, they were out of shot; so glancing at his arms to see they were within reach he seized the night-glass, and again sought to examine the darkness. He soon believed that he could make out beneath, some dim figures gliding towards the tree: by a moonbeam, which shed its light for a moment between the clouds, he distinctly recognised a number of people moving about in the shadow. He remembered the adventure with the dog-headed monkeys, and placed his hand on the Doctor's shoulder, who instantly awoke.

"Silence," said Kennedy. "Speak in a whisper."

"Is there anything stirring?"

"Yes. Waken Joe."

And as soon as Joe was awake, Kennedy told what he had seen.

"These confounded monkeys again," said Joe.

"It may be; but we must be on guard."

"Joe and I," said Kennedy, "will get down into the tree by the ladder."

"And whilst you do," said the Doctor, "I will take steps to insure our speedy ascent."

"Agreed!"

"Let us get down," said Joe.

"Only use your arms in the last extremity," said the Doctor; "it is useless to reveal our presence in these parts."

Dick and Joe replied by a sign; they then slid down into the tree, and took up a position in the fork of two large branches where the anchor had caught. For some minutes they listened silent and immovable among the foliage. A sound of something rubbing along the bark was heard, and Joe caught the hand of the Scot.

"Do you hear?"

"Yes. Something approaches."

"If it is a serpent? The hiss which surprised you——"

"No; there is something human about this."

"I would rather it was savages—these reptiles disgust me."

"The noise increases," whispered Kennedy, a minute or two afterwards.

"Yes, somebody is climbing up."

"Look out on this side, I will watch the other."

"All right."

They were on the top of an enormous branch, which grew right up from the heart of a great baobab tree; the darkness caused by the thick foliage was profound; and Joe, bending down to Kennedy's ear, pointed downwards, and whispered—

"Niggers!"

A few words, uttered in low tones, met their ears. Joe raised his gun to his shoulder.

"Make ready," said Kennedy.

The savages had really climbed the baobab; they swarmed on all sides, crawling along the branches like reptiles, clambering slowly but surely, their presence being now betrayed by the smell of the stinking grease with which they cover their bodies. Shortly, Dick and Joe caught sight of two heads on a level with the branch where they were.

"Steady," cried Kennedy. "Fire!"

The double report sounded like thunder, and was lost in cries of grief. In a moment all the horde had disappeared. But in the midst of the yells arose a cry—unexpected, impossible! A human voice had certainly uttered in French these words:—

A Double Shot.

"A moi! A moi!"

Kennedy and Joe, stupefied, regained the car like lightning.

"Did you hear?" said the Doctor to them.

"Undoubtedly! that supernatural cry—'A moi! A moi!'"

"A Frenchman in the hands of those savages!"

"A traveller!"

"A missionary, perhaps!"

"Unhappy man," cried Dick, "they are murdering him!"

The Doctor in vain sought to disguise his emotion.

"Not a doubt," said he, "an unfortunate Frenchman has fallen into the hands of these wretches. We will not start till we do all in our power to save him. The reports of our guns will have announced to him unlooked-for help—a providential intervention. We shall not falsify that last hope: is that your advice?"

"It is our advice, and we are ready to obey you."

"Let us put our heads together, and as soon as it is light be ready to carry him off."

"But how are we to scatter these wretched niggers?" asked Kennedy.

"It is clear to me," said the Doctor, "from the way they scampered away, that they are ignorant of fire-arms; we must, therefore, avail ourselves of their terror; but we must wait for daylight before

we can act, and we can then arrange our plans for saving the poor fellow when we can see the locality."

"This unfortunate man cannot be very far off," said Joe, "for——"

"A moi! A moi!" repeated the voice, in a yet feebler tone.

"The monsters!" cried Joe. "Should they kill him to-night!"

"Do you understand?" cried Dick, seizing the Doctor's hand. "If they should kill him to-night!"

"Not likely; these savages murder their prisoners in the light of day—they want the sun to see the deed."

"If I profit by the darkness," said the Scot, "and glide down to this poor fellow?"

"I'll go with you, Mr. Dick."

"Stop, stop—your proposal does honour to your hearts and to your courage; but you would only expose us all, and do no good to the man you desire to save."

"How so?" said Kennedy; "these savages are terrified and dispersed. They won't come back."

"Dick, I beg of you, obey me. If you should permit yourself to be surprised all would be lost—I act for the common good."

"But this unfortunate man who is waiting and hoping! Not to reply to him! No one to go to his assistance! He will think his senses have deceived him, and that he has heard nothing."

"We will reassure him," said the Doctor, and making a speaking trumpet of his hands, he called out in the language of the stranger—"Whoever you are, have confidence; three friends are watching over you."

A terrible howl answered him, drowning entirely the reply of the prisoner.

"They are murdering him!" cried Kennedy. "Our intervention will only serve to hasten the hour of torture. We must act."

"But how, Dick? What can you pretend to do in such utter darkness?"

"If it was only daylight," cried Joe.

"Well, if it was daylight?" asked the Doctor in a singular manner.

"Nothing simpler, Samuel. I would descend and scatter these blackguards with a shot or two."

"And you, Joe?"

"I should act more prudently, sir. I would arrange with the prisoner to run in the best way for us to save him."

"How could you tell him?"

"By means of the arrow I caught, to which we could fasten a note; or by shouting to him, for the niggers would not know what we said."

"Your plans are impracticable, my friends; it would be a most difficult thing for that poor wretch to be saved, even admitting that he eluded the vigilance of his executioners. As for you, Dick, by boldness and the terror struck by our fire-arms,

your project might succeed; but if it miscarried, you would be lost, and we should have two persons to save instead of one. No, we must look to all chances and act differently."

"Well, but act at once!" cried Dick.

"Perhaps!" said the Doctor in a singular tone.

"Can you then, sir, disperse this darkness?"

"Who knows, Joe?"

"Ah! if you could, sir; you would be the wisest man in the world."

The Doctor reflected.

His two companions watched him eagerly; they were both highly excited by the state of affairs.

At last the Doctor spoke.

"Here is my plan," said he. "We have 200 lbs. of ballast, for the sacks have never been touched. I admit that this prisoner, a man evidently crushed by sufferings, will weigh as much as one of us—we shall still have 60 lbs. to get rid of in order to ascend more rapidly."

"How do you intend to manage?" asked Dick.

"Look here, Dick; if I can get to the prisoner, and throw over as much ballast as can equal his weight, I don't change the equilibrium of the balloon; but then if I wish to obtain a rapid ascent to escape from this tribe of negroes, I must employ more energetic means than the furnace; but in throwing over that excess of ballast at a given moment I am sure to rise with extreme quickness."

"That is evident."

"Yes; but it has one inconvenience, which is, that to descend later I shall have to lose a quantity of gas proportional to the increase of ballast I shall have thrown out. Then this gas is very precious; but we must not regret the loss, when a man's life is in question."

"You are right, Samuel, we should sacrifice everything to save him."

"To work then—let these sacks be placed at the edge of the car, so that they can be thrown over in an instant."

"But this darkness?"

"Hides our preparations, and will not be dispelled till they are completed. See that all the arms are placed ready to hand, perhaps we shall have to fire; let me see, we have the rifle, one shot; the two double-barrels, four; the two revolvers, twelve; in all seventeen shots that can be fired in a quarter of a minute. But perhaps we shall not have recourse to fire-arms. Are you ready?"

"We are ready," answered Joe.

The sacks were properly placed, and the arms ready to hand.

"Good," said the Doctor; "keep your eyes about you. Joe is to throw out the ballast, and Dick to carry off the prisoner; but nothing is to be done till I give the order. Joe, go down and free the anchor, and come up quickly into the car."

Joe slid down the rope, and was back in a minute; the "Victoria," entirely free, floated in the air without moving.

During this time the Doctor convinced himself that there was enough gas in the mixing-case to last for some time, without using the Bunsen battery. He took the two perfectly isolated conducting wires, which were used in the decomposition of the water; then searching in his travelling-bag, he brought out two pieces of charcoal, cut to a point, and fastened them to the end of each wire.

His two friends looked on, without understanding what he was about, but they said nothing. When the Doctor had finished his work, he stood up in the centre of the car, took one of the pieces of charcoal in each hand, and approached their points.

Suddenly, an intense and dazzling light, unbearably brilliant, was produced between the two charcoal points, and an immense body of electric light absolutely shattered the darkness.

"Oh, master!" cried Joe.

"Not a word," said the Doctor.

CHAPTER XV.

A Flash of Light.—The Missionary.—Saved.—The Priest.—Little Hope.—The Doctor's Attention.—A Life of Abnegation.—Pass a Volcano.

THE Doctor directed his powerful ray of light to different points, and stayed at last at a spot whence cries of terror proceeded, and to which his two companions cast eager looks.

The baobab, above which the "Victoria" floated, almost motionless, rose in the centre of a clearing; between fields of sesame and sugar-cane, a cluster of about fifty low and conical huts could be made out, around which swarmed a numerous tribe.

A hundred feet below the balloon rose a post. At the foot of this post lay a human creature, a young man of thirty at the most, with long black hair, half-naked, thin, and blood-stained, covered with wounds, and whose head was bent on to his breast.

The half-effaced marks of the priestly tonsure were still visible on the top of his head.

"A missionary! a priest!" cried Joe.

"Unfortunate wretch!" said Dick.

"We will save him, Dick; we will save him!" exclaimed the Doctor.

The crowd of negroes, perceiving the balloon like an enormous comet with a fiery tail, were

The Electric Light.

struck with a terror easy to conceive. At their cries the prisoner raised his head. His eyes shone

with hope, and without quite understanding all that was passing, he extended his hands towards his unhoped-for saviours.

"He lives! he lives!" cried the Doctor. "Heaven be praised; these savages are plunged into terrible affright; we shall save him. You are ready, friends?"

"We are ready."

"Joe, extinguish the furnace."

The Doctor's order was executed. A breeze, scarcely perceptible, gently drove the "Victoria" towards the prisoner; at the same time it insensibly descended, owing to the contraction of the gas. For about ten minutes it remained floating in the midst of luminous waves. The Doctor cast over the crowd the brilliant light, almost blinding in its brightness; the tribe, under the influence of an indescribable fear, disappeared, one after another, into their huts, and solitude reigned round the post. The Doctor had not over-estimated the effect of the apparition of the "Victoria" casting the brilliancy of sunlight in that intense darkness.

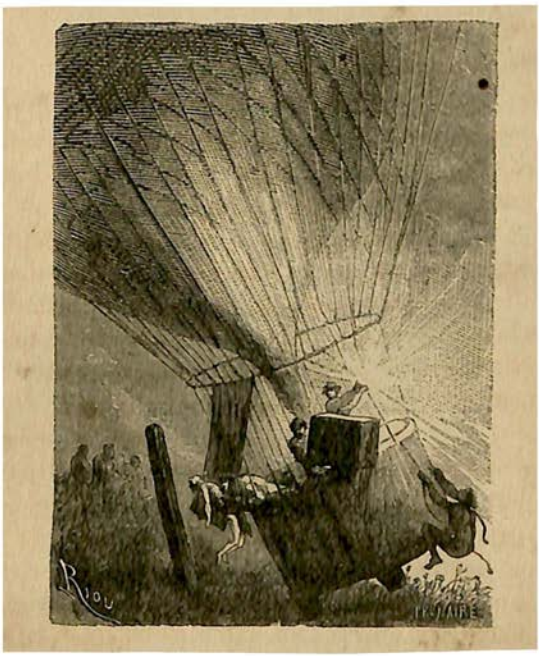
The car neared the ground; and several of the bolder negroes, comprehending that their victim was about to escape, returned with loud cries. Kennedy took up his gun, but the Doctor ordered him not to fire.

The priest, on his knees, not having the strength to stand upright, was not even tied to the post; his weakness rendering such fastening unnecessary.

The instant the car touched the ground, Dick

threw his arm round the priest and lifted him into it; Joe, at the same instant, throwing out the two hundred pounds of ballast.

The Doctor anticipated ascending with extreme rapidity; but, contrary to his expectation, the



balloon, after rising three or four feet from the ground, became immovable.

"What holds us?" cried he, in accents of terror.

Some of the savages were running towards them, uttering ferocious yells.

"Oh!" cried Joe, leaning over, "one of these cursed niggers has fastened on under the car."

"Dick, Dick," cried the Doctor, "the water tank!"

Dick at once comprehended his friend's desire,

and raising one of the tanks, weighing over a hundred pounds, he cast it over.

The "Victoria," thus suddenly disballasted, gave a bound into the air, three hundred feet high, amid the roaring of the tribe, from whom the prisoner escaped in a blaze of dazzling light.

"Hurrah!" cried the Doctor's two companions.

Again the balloon gave a bound, which carried it to the height of a thousand feet.

"What's the matter now?" exclaimed Kennedy, nearly losing his balance.

"Nothing; it is only that beggar below letting go," said the Doctor, quietly.

Joe, looking quickly over, could see the savage, with his arms extended, turning round and round in space, and soon after dashed on the earth. The Doctor separated the two electric wires. It was one in the morning.

The fainting Frenchman opened his eyes.

"You are saved!" said the Doctor to him.

"Saved," replied he in English, with a sad smile, "saved from a cruel death! I thank you, my brothers; but my days are numbered, even my hours, and I have but a short time to live."

And the missionary, exhausted, relapsed into his lethargy.

"He is dying," said Dick.

"No, no," replied the Doctor, "but he is very weak: let us lay him down under the tent."

He laid gently down on their rugs, this poor, starved body, covered with cicatrices and wounds yet bleeding, in which, in twenty places, steel and fire had left their frightful traces. The Doctor made some lint from a handkerchief, and laid it on the wounds, after washing them. These attentions

he rendered with all the skill of a physician, and then taking a cordial from his medicine chest, he poured a few drops on the lips of the priest.

The missionary with difficulty opened his lips to murmur, "Thanks, thanks."

The Doctor saw he ought to be left in perfect quiet, and so, drawing the curtains of the tent, went to see how the balloon was steering.

The balloon, in reckoning the weight of its new guest, had been lightened nearly a hundred and eighty pounds, so that it retained its elevation without the assistance of the furnace. At daybreak a current impelled it towards the west-north-west. The Doctor stood looking at the priest in his slumber of exhaustion.

"Shall we be able to save this companion whom heaven has sent us?" asked Dick. "Is there any hope?"

"Yes, Dick, with care, in this pure air."

"How that man has suffered," said Joe. "He did a bolder feat than ours when he came alone amongst these savages."

"That's true," replied Kennedy.

All day the Doctor would not permit his sleep to be disturbed; it was a lethargic sleep interrupted by murmurs of pain, which disquieted the Doctor.

Towards evening the "Victoria" rested stationary in the midst of the darkness, and during the night, whilst Joe and Kennedy lay by the sick

man's side, the Doctor watched over the safety of all.

Next morning, the "Victoria" had hardly moved towards the west; the day proved to be clear and bright. The sick man seemed a little stronger, and lifting the curtains of the tent, he inspired with delight the fresh air of the morning.

"How do you feel?" asked the Doctor.

"Better, perhaps," he replied; "but you, my friends, I have as yet only seen you in a dream. I can scarcely account for what has taken place. Tell me who you are, that your names may not be forgotten in my last prayer."

"We are English travellers attempting to cross Africa in a balloon, and during our passage we have had the happiness to save you."

"Science has its heroes," said the missionary.

"But Religion has its martyrs," replied the Scot.

"You are a missionary?" asked the Doctor.

"I am a priest of the Lazarite Mission; Heaven sent you to me—may Heaven be praised for it! The sacrifice of my life was made. But you come from Europe. Tell me of Europe, of France! I have heard no news of them for five years."

"Five years alone among the savages!" cried Kennedy.

"There are souls to save," said the young priest; "ignorant and barbarous brethren, whom religion alone can instruct and civilise."

The Doctor, responding to the desire of the missionary, talked long to him of France.

He listened eagerly, and tears flowed from his eyes. The poor young man took in turn the hands of Kennedy and Joe in his own, which were burning with fever; but he managed to drink with pleasure a few cups of tea which the Doctor made for him. He was, indeed, strong enough to raise himself a little, and to smile on finding himself carried through the clear air.

"You are hardy travellers," said he, "and you will succeed in your bold enterprise. You will again behold your parents, your friends, your country; you——"

His weakness here overcame him, and he had again to lie down—a prostration which left him nearly dead in the Doctor's hands.

At last he could not contain his emotion; he felt his life was ebbing away. Were they indeed going to lose him whom they had saved from the torture?

Again the Doctor dressed the frightful wounds of the martyr, and sacrificed a great portion of his stock of water in bathing his burning limbs. He surrounded him with the most tender and intelligent attention. Little by little the patient came back again to consciousness, but not to life. The Doctor made out his history from his interrupted discourse.

"Speak your native language," said the Doctor; "I understand it, and it will fatigue you less."

The missionary was a poor young man, a native of Aradon, a village in Bretagne; his first instincts had led him to embrace an ecclesiastical career; to that life of abnegation he was desirous of adding a life of danger, and acted as one of the priests of the mission of which St. Vincent de Paul was the glorious founder. At twenty he left his country for the inhospitable shores of Africa. Thence, by degrees, overcoming obstacles, braving privations, walking and praying, he had advanced into the midst of the tribes who dwell by the waters of the Upper Nile. For two years his religion was repulsed, his zeal misunderstood, his charities taken in bad part; he was kept prisoner by one of the most cruel tribes of Nyambarra, the object of a thousand insults. But throughout all he taught, he instructed, he prayed. The tribe was broken up, and he was left for dead after one of those combats so frequent between these nations; but instead of retracing his steps, he continued his evangelical pilgrimage. He got on best when they took him for a madman; he became familiar with the idioms of these countries.

For another two years he wandered throughout these barbarous regions, strong in that superhuman strength which comes from on high; for a year he had resided with that tribe of the Nyam-Nyam, called the Barafri, which is one of the most savage. A few days before the chief had suddenly died, and the unexpected death was laid at his door, and

it was resolved to sacrifice him. For forty hours he had been subjected to the torture, and as the Doctor surmised, he was to have been killed at mid-day.

When he heard the noise of fire-arms he thought he was dreaming; but nature rallied for a little, and he had then called out, and heard, as if from heaven, the voice of consolation.

"I do not regret," added he, "the life I am about to lose. Blessed be heaven that I have been permitted to press a friendly hand, and hear the accents of my country once more."

The missionary waxed feebler; the day passed between hope and fear; Kennedy much moved, and Joe passing his hand across his eyes when he thought himself unnoticed.

The "Victoria" travelled slowly; the very wind seemed to treat its precious burden with gentleness.

Towards evening Joe signalled a great light in the west; in higher latitudes it might have been taken for the aurora-borealis. The whole sky seemed on fire. The Doctor examined the phenomenon attentively.

"It is a volcano in full activity," said he.

"And the wind is bearing us right for it," said Dick.

"Never fear, we will cross it at a safe height."

Three hours after the "Victoria" was amongst great mountains, her exact position being longitude 24° 15′, latitude 4° 42′.

The Volcano.

Before them was a blazing crater pouring out torrents of melted lava, and casting up enormous blocks of stone to a great height, while on all sides streams of liquid fire fell in dazzling cascades: a magnificent, but a dangerous sight, for the wind steadily wafted the balloon towards that fiery atmosphere. This obstacle, which they could not avoid, had to be passed at a safe height, and the furnace was kept at full work; the "Victoria" rose to an elevation of six thousand feet, leaving a clear distance of eighteen hundred feet between herself and the volcano.

From his sick couch, the dying priest could contemplate this fiery crater, from which issued, with loud noises, a thousand sheaves of flame. This overflow of waves of fire clothed the sides of the mountain with a perfect carpet of flames. The lower part of the balloon shone again in the night, a torrid heat reached even to the car, and the Doctor made haste to fly from such a perilous situation.

About ten at night the mountain had become a red speck on the horizon, and the "Victoria" peacefully pursued her way in a less elevated zone.

CHAPTER XVI.

Joe's Rage.—The Death of a Christian; the Burial.—Masses of Quartz.—Joe's Hallucinations.—Valuable Ballast.—Across the Golden Mountains.—Joe's Despair.

A MAGNIFICENT night fell over the earth. The priest peacefully slept the sleep of weakness and prostration.

"He will never get over it," said Joe, "poor young fellow; hardly thirty years old."

"He will die in our arms," said the Doctor; "his respiration, already feeble, is becoming still more so, and I can do nothing to save him!"

"The infamous beggars!" cried Joe, in a sudden burst of passion. "And to think that this worthy priest can yet excuse and pardon them."

"Heaven has made his last night on earth a beautiful one; he will suffer little more, and his death will be like a peaceful sleep."

The dying man muttered some words from time to time, his respiration became worse, and he asked for air. The curtains of the tent were withdrawn, and he breathed with delight the gentle breezes of that lovely night. The trembling light of the stars and the rays of the moon fell full upon him.

"My friends," said he, in a weak voice, "I am going; may Heaven conduct you safely to your destination, and repay you all your kindness to me."

"There is still hope," answered Kennedy. "This is only a passing weakness; you will not die. How could any one die on such a lovely night?"

"Death is here!" replied the missionary, "I know it. Let me look it in the face. Death, the commencement of eternity, is but the end of earthly cares. Place me on my knees, my brothers, I beseech you."

Kennedy raised him. It was affecting to see his powerless limbs bend beneath him.

"My God," cried the dying apostle, "my God, have pity on me!"

His face shone. Far from that earth of which he had never known the joys, bathed in the gentle light of the stars and moon, and on the road to that heaven to which he seemed raised as by miraculous assumption, he seemed to have already begun a new existence.. His last action was one of blessing his newly-found friends, and he fell back into the arms of Kennedy, whose face was bathed in tears.

"Dead!" said the Doctor, bending over him; "dead!"

And with one accord the three friends knelt down and prayed in silence.

"To-morrow morning," said the Doctor, "we

will bury him in this land of Africa, which he has watered with his blood."

During the remainder of the night the body was watched by the Doctor, Dick, and Joe, by turns, and not a word broke the religious silence. Every eye was full of tears.

On the morrow the wind came from the south, and the "Victoria" travelled slowly above a vast plateau of mountains. They saw extinct craters and savage ravines, but not a drop of water on their desert crests; piled-up rocks and ghastly white pits of marl—all denoted an awful sterility.

Towards mid-day, in order to inter the body, the Doctor resolved to descend into a ravine in the midst of plutonic rocks of primitive formation. The surrounding mountains would shelter him, and allow him to bring the car to the ground, for there was no tree to which he could make fast.

But, as he had explained to Kennedy, in consequence of the loss of ballast since the taking of the priest, he could only descend on the condition of losing a proportional quantity of gas. He therefore opened the valve of the exterior balloon; the hydrogen escaped, and the "Victoria" sank tranquilly into the ravine.

As soon as the car touched the earth, the Doctor closed the valve. Joe leaped to the ground, still keeping one hand on the edge of the car, and with the other collecting a number of stones, which very

soon replaced his weight; he could then employ both hands, and he very soon threw into the car five hundred pounds weight of stones, and the Doctor and Kennedy could descend in their turn. The "Victoria" was stationary, her buoyancy being unable to raise her.

Besides, it was not necessary to have a great number of these stones, for those collected by Joe were very heavy, a fact which aroused the Doctor's attention. The ground was covered with quartz and porphyritic rocks.

"Here is a singular discovery," said the Doctor to himself.

Meanwhile, Kennedy and Joe had gone a few paces off to find a spot for the grave. The heat in the ravine was like that of a furnace, the mid-day sun pouring its burning rays directly down from above.

It was first necessary to clear the ground of the stones which encumbered it, in order to make the grave deep enough to protect the body from wild beasts. It was at last prepared, and the body of the martyr laid in it with respect.

The earth was again laid in over these mortal remains, and over all some large rocks were disposed so as to make a kind of tomb.

The Doctor remained motionless and lost in reflections; he did not attend to the appeal of his companions to look for a shelter from the heat of the day.

"Of what are you thinking?" asked Kennedy.

"Of a startling contrast of nature, of a singular

The Missionary's Burial.

effect of chance. Do you know in what earth that man of abnegation, that poor priest has been buried?"

"What do you mean, Samuel?" asked the Scot.

"This priest, who had taken the vows of poverty, now rests in a mine of gold!"

"A mine of gold!" cried Kennedy and Joe.

"A mine of gold," said the Doctor, quietly. "These rocks, which you kick under your feet as stones of no value, are really ore of the greatest purity."

"Impossible! impossible!" repeated Joe.

"You will not have to search long in these fissures of slaty schist to find valuable nuggets."

Joe threw himself like a madman upon the scattered fragments, and Kennedy was not long in imitating him.

"Calm yourself, my good Joe," said his master.

"Ah, sir, you take it easy."

"What! a philosopher of your temper——"

"Ah, sir, no philosopher can stand this."

"Let me see—reflect a bit; of what use to us is all this wealth? we can't carry it away."

"Not carry it away, indeed!"

"It is a little too heavy for our car. I hesitated about letting you share my discovery, for fear of exciting useless regrets."

"What!" said Joe, "abandon this treasure! A fortune for us! all for us! to leave it!"

"Take care, my lad! Have you caught the gold fever? Has not that dead man, whom you have just buried, taught you the vanity of human affairs?"

"That is very true," replied Joe; "but then the gold! You will help me, Mr. Kennedy, to collect a few of these millions?"

"What can we do with it, my poor Joe?" said the hunter, unable to restrain a smile. "We did not come here to seek our fortune, and we certainly cannot take it with us."

"Millions, too, are rather heavy," said the Doctor, "to carry in your pocket."

"After all," said Joe, driven to his last resource, "could we not, in place of sand, take this ore for ballast?"

"Well, I agree to that, but you must not make wry faces when it becomes necessary to throw a thousand millions or so overboard."

"Thousands of millions!" replied Joe, "can that all be gold?"

"Yes, indeed; it is a reservoir in which nature has heaped up her treasures for ages. There is enough there to enrich entire countries—an Australia and a California united, in the depths of a desert."

"And all that must remain useless?"

"Perhaps. In any case, see what I can do to console you."

"That will be difficult," said Joe, with a contrite look.

"Listen, then. I am going to take the exact situation of this place; I will give it to you, and when you reach England you can give part of it to

your fellow-countrymen, if you think it will make them happy."

"Ah, sir, I see very well that you are right; I resign myself, since there is no help for it. Let us fill our car with this precious ore. What is left at the end of the voyage will always be so much gained."

Joe set to the work with all his heart, and soon had a thousand pounds weight of quartz in the cradle, in which the gold lay in veins of the greatest hardness.

The Doctor looked on smilingly, and during Joe's progress took the situation of the missionary's tomb. It was in longitude 22° 23', and north latitude 4° 55'.

Then throwing a last look at the mound that marked the last resting-place of the poor Frenchman, he retired to the car.

He would have liked to raise a modest cross over this grave, abandoned amid the deserts of Africa, but not a tree grew anywhere about.

A very serious consideration had just struck the Doctor. He would have given a great deal of that gold to find a little water; he would have liked to replace that thrown away when the negro was lifted up, but that was impossible in these arid wilds; this thought disquieted him. Obliged to feed his furnace constantly, he now began to run short for enough to drink, and he determined to seize the first opportunity to renew his supply.

On reaching the car, he found it encumbered with the stones collected by the greedy Joe. He got in without saying anything. Dick took his usual place, and Joe followed, not without casting a covetous look on the treasures of the ravine.

The Doctor lighted his furnace, and the gas expanded; but the balloon did not stir.

Joe watched him with uneasiness, but said not a word.

"Joe!" said the Doctor.

Joe did not reply.

"Joe, did you hear me?"

Joe made a sign that he heard, but did not want to understand.

"You are going to do me the pleasure of throwing a lot of that ore to the ground."

"But, sir, you allowed me——"

"I have allowed you to replace the ballast, that's all."

"Well, but——"

"Do you wish us, then, to remain eternally in this desert?"

Joe cast a despairing look to Kennedy, but that gentleman took no notice.

"Well, Joe!"

"Something the matter with your furnace," replied the obstinate donkey.

"My furnace is lighted, as you very plainly see, but the balloon will not rise till you throw out some ballast."

Joe scratched his head and took up a piece of quartz—the smallest of all—weighed it and re-weighed, threw it up and caught it again; it weighed about three or four pounds. At last he threw it out.

The "Victoria" did not move!

"Hallo!" cried he, "we don't yet stir."

"Not yet," said the Doctor. "Go on."

Kennedy laughed. Joe then threw out about a dozen pounds; the balloon was immovable. Joe grew pale.

"My good lad," said the Doctor, "Dick, you and I, weigh about four hundred pounds, so that you must get rid of a weight at least equal to ours."

"Four hundred pounds weight to throw away!" cried Joe, piteously.

"Go on; there is no help for it."

So Joe, heaving the deepest sighs, set to work to get rid of the ballast, every now and then stopping.

"There we go!" said he.

"Not a bit of it," was the invariable reply.

"Now we are off!" he cried.

"Go on heaving."

"It is rising; I am sure of it."

"Go on heaving," repeated Kennedy.

Then Joe, seizing a last block in despair, threw it out of the car; the "Victoria" rose a hundred feet, and, aided by the furnace, very soon cleared the surrounding peaks.

"Even now, Joe," said the Doctor, "you have a

very pretty little fortune left, and if you can only take care of it till the end of our voyage, you will be rich for the rest of your days."

Joe did not reply, but stretched himself on his couch of golden ore.

"Just see, my dear Dick," the Doctor went on, "the power of this metal over the best lad in the world. What greed, what passions, what crimes the knowledge of the existence of such a mine would produce! The thought is saddening."

At evening, the "Victoria" had travelled ninety miles to the west, and they were fourteen hundred miles, in a direct line, from Zanzibar.

CHAPTER XVII.

They Approach the Desert.—No Wind.—How much Water?—Equatorial Nights.—The Doctor uneasy.—How Matters stand.—Kennedy's Answer; and Joe's.—Another Night.

THE "Victoria," anchored to a solitary and withered tree, passed the night in perfect tranquillity; the travellers were able to procure a little of the sleep of which they stood in need; the emotions of the preceding days had left sad recollections. Towards morning, the sky regained its brilliant clearness and its heat; the balloon rose in the air, and after some fruitless attempts, at last entered a current which bore it to the north-west.

"If I do not deceive myself," said the Doctor, "we have accomplished nearly half our voyage in ten days, but at the rate we are travelling it will take us months to end it. This is additionally annoying as we are threatened with wanting water."

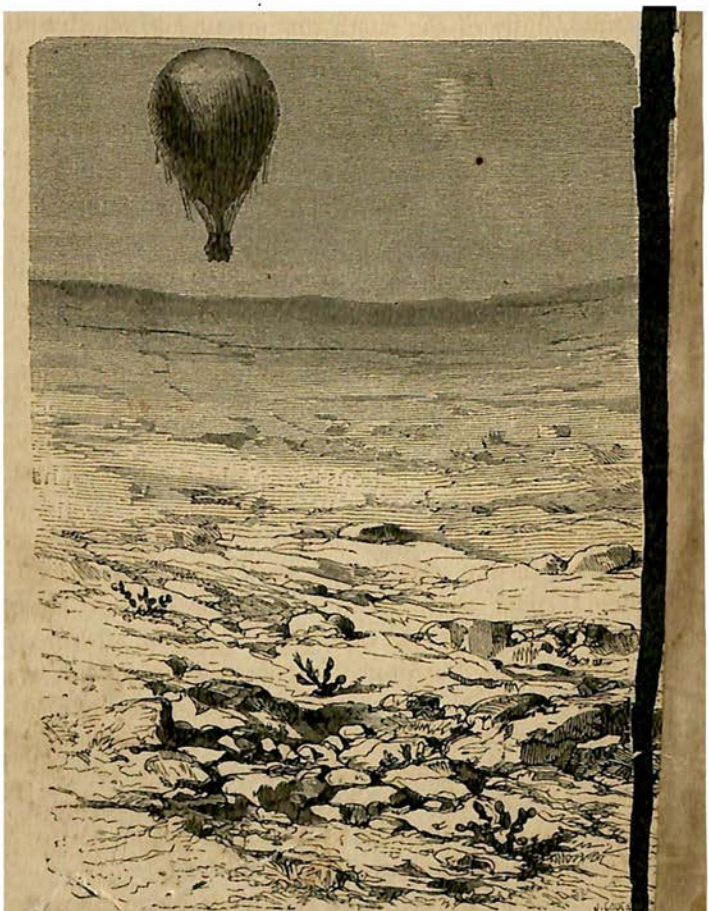
"But we shall find some of it," replied Dick; "it is impossible that we shall not meet with some river, or brook, or lake, in this vast extent of country."

"I hope so."

"Do you think it is this load of Joe's that is preventing our getting on?"

Kennedy spoke thus to tease the bold Joe, all the more willingly that he had himself, for an instant, experienced the same kind of hallucination; but all was said laughingly and in good humour.

Joe cast a piteous glance at him. The Doctor, however, did not reply to him. He was thinking, not without secret terrors, of the vast solitudes of the Sahara; there caravans are weeks without meeting with a well, or being enabled to slake their thirst. He examined with the most careful glances the slightest depressions in the soil. These precautions, and the incidents of the last few days, had sensibly affected the spirits of the three travellers. They spoke less, and occupied themselves more with their own thoughts. Joe was no longer the same since he had feasted his eyes on that ocean of gold; he regarded with greedy looks those stones at the bottom of the car—worthless to-day—inestimable to-morrow. The appearance of this part of Africa was, besides, calculated to render one uneasy. They had entered on the desert. No more villages, not even a cluster of huts. Vegetation had shrivelled up. A few stunted plants, like those seen in the heathy districts of Scotland, grew here and there, with mastic trees and thorny bushes; beyond stretched a waste of white sand and flints.



The Beginning of the Desert.

In the midst of this sterility, the rudimentary foundations of the earth rose around in sharp and narrow ridges of the living rocks. These signs of aridity gave the Doctor food for thought. It did not seem as if a caravan had ever dared the passage of that desert country; it would have left some traces visible of an encampment—the whitened bones of the men or beasts who comprised it. But not a sign was to be seen, and one felt that soon an immensity of sand would reign supreme in that desert wilderness.

However, they were not the men to go back. Forward! was the word, and the Doctor asked no better. He had wished for a tempest to urge them beyond this frightful country. And not a cloud was to be seen!

At the end of that day, the "Victoria" had not covered thirty miles. If water had not failed them! But there were but three gallons left! The Doctor put on one side a gallon, destined to quench the burning thirst caused by a heat of ninety degrees. Two gallons then remained to feed the furnace, and they would only produce four hundred and eighty cubic feet of gas; but the furnace expended about nine cubic feet an hour, so that they could only travel for fifty-four hours: all this was mathematically exact.

"Fifty-four hours," said he to his companions; "but as I have quite made up my mind not to travel at night for fear of missing a stream, a brook, or

pool, we have still three days and a half of travelling power, and during that time, water must be found at all risks. I have thought it best to explain how we stand to you, my friends, for I only reserve a single gallon for our thirst, and we must put ourselves on strict rations."

"Do you apportion the quantity," replied the hunter; "but it is not yet time to despair; we have three days before us, you say?"

"Yes, my dear Dick."

"Well, then, as our regrets won't do any good, in three days it will be time to talk about it. Till then, we must keep a brighter look out than ever."

At the evening meal, the water was strictly measured; there was more brandy in the grog, but that liquor had to be distrusted, as it was more likely to cause thirst than to refresh them.

The car rested that night on a plateau, which exhibited a very great depression. It was scarcely eight hundred feet above the level of the sea. This circumstance gave some hopes to the Doctor, who recalled the belief of geographers that a vast extent of water exists in the centre of Africa; but, if this lake existed, it had to be found. Meanwhile, not a change occurred in the burning sky. To the quiet night and its starry glory succeeded the changeless day of burning sun; his first beams ushered in the terrible heat.

At five in the morning the Doctor gave the signal of departure, and for a long time the

"Victoria" remained motionless in a leaden atmosphere. The Doctor could have escaped from this intense heat by rising to a greater height, but this involved the expending of a large quantity of water —a thing then impossible. He contented himself with keeping a hundred feet from the earth, where a light current wafted him towards the western horizon.

Breakfast consisted of some dried meat and pemmican. By mid-day the "Victoria" had hardly advanced a mile or two.

"We cannot go any quicker," said the Doctor; "we do not command—we can only obey."

"Ah! my dear Samuel," said Dick, "this is an occasion on which a propeller would not be despised."

"Doubtless, Dick, always supposing that no water would require to be expended in setting it in motion; for then the situation would be exactly the same; besides, nothing practicable has yet been invented. Balloons are just now in the same position as ships before steam: it took six thousand years to imagine the paddle and screw. We have therefore time to wait."

"This confounded heat!" said Joe, wiping his brow, running with perspiration.

"If we had water, this heat would do us some service, for it would expand the hydrogen in the balloon, and make a less flame necessary for the furnace. It is true, if we were not at the end of our

water we should not have to economise. Ah! cursed savage, who cost us that precious case!"

"You don't regret what you did, Samuel?"

"No, Dick, since we were able to save that unfortunate man from a horrible death; but the hundred pounds of water we had to throw away would be very useful to us just now. It would represent twelve or thirteen days more of our voyage, and would be sufficient to take us across this desert."

"We have made half the voyage at least," said Joe.

"As to distance, yes; as to duration, no, if the wind leaves us, and it seems to have a disposition to fail entirely."

"Well, sir," replied Joe, "it is of no use grieving; here we are, and it will not do to despair. We shall find water, I assure you!"

Mile upon mile the ground became more depressed; the undulations of auriferous mountains just showed above the plain, like the last projections of exhausted nature; a scanty herbage replaced the beautiful trees of the East; some patches of parched verdure still struggled against the encroachment of the sands; large rocks fallen from distant summits, broken to pieces in their fall, were scattered in sharp flints, which would soon be transformed to coarse sand, and then into impalpable dust.

"Here, then, is Africa, as you pictured it to

yourself, Joe! I was right when I said, have patience."

"Well, sir," replied Joe, "it is very natural, at least, the heat and the sand; it would be absurd to expect anything else in such a country. Look you," added he, laughing, "I don't believe in your forests and meadows; it would not be worth the trouble of coming so far only to find a country like England. Now, here, this is something like Africa!"

At evening the Doctor reckoned that the "Victoria" had not made twenty miles all that blazing day. A hot darkness covered everything as soon as the sun sank beneath the horizon, which seemed drawn with the accuracy of a straight line.

Next day was the 1st of May, a Thursday; but the days succeeded each other with a monotony without relief, each morning resembled the preceding one, mid-day poured down the same inexhaustible rays of burning sunshine, and night condensed in its shades that heat which the following day would again hand over to the following night. The wind, scarcely to be felt, was more like a last expiration than a breath, and the moment was known when even that would cease.

The Doctor fought against the feelings roused by the dreariness of the situation, with the calm exterior and coolness of a heart inured to it. Glass in hand, he examined every part of the horizon; he saw the last little hills insensibly decrease, and

the last vegetation disappear; before him stretched all the immensity of the desert. The responsibility which weighed on him affected him very much, although he did not show it. These two men, both friends of his, he had dragged from afar, almost by the strength of friendship and of duty.

Had he acted well? Was it not to try prohibited tracks? Had he not tried by this voyage to pass the limits of the impossible? Was not a knowledge of this mysterious continent reserved for ages yet to come? All these thoughts kept passing through his mind, till at last he brought logic and reason to bear on them.

After having stated all that he should not have done, he began to ask what it was necessary to do. Would it be impossible to retrace their steps? Were there no currents at a higher elevation which would bear them to countries less desert?

A portion of the country he had passed over, he knew not what lay before him, and he resolved to lay a clear statement of the position of affairs before his two companions. He clearly showed them how they were placed, what had been done, and what remained to do. It was just possible that they might be able to return; at all events, they could try to do so. What was their opinion?

"I have no opinion but my master's," said Joe. "What he will have to suffer I can suffer, and better than he. Where he goes I will go."

"And you, Kennedy?"

"I, my dear Samuel, I am not a man to give in: no one knew better than I did the perils of the enterprise; but, since we fairly faced them, I determined not to see them. I am with you body and soul. In our present situation, my advice is that we should push on to the end; besides, the dangers of returning appear to me to be too great to encounter. So now let us push ahead, since you can reckon on both of us!"

"Thanks, friends," said the Doctor, much moved. "I confess I expected such devotion, but I wanted to hear your cheerful and encouraging words;" and the Doctor shook both by the hand.

"Now listen to me," proceeded the Doctor. "After my ascents are over, we shall not be more than three hundred miles from the Gulf of Guinea. The desert does not stretch indefinitely, for the coast there is inhabited, I well know, to some distance inland. If it is necessary, we will direct our course towards this coast, and it is impossible that we shall not meet with some oasis or some wells where we can renew our supply of water; but our great difficulty is the lack of wind, without that we can only rise to hover in mid-air without advancing."

"Let us wait with resignation," said Dick.

But though each strained his eyes in a fruitless search during that interminable day, nothing appeared which could give rise to a hope.

At last the sun sank; his level rays lying like

A solemn Sunset.

horizontal lines of fire along the flat immensity. It was the desert!

Our travellers had only made a distance of fifteen miles since the day before, and had expended a hundred and thirty-five cubic feet of gas and two pints of water, which had been allowed to quench their burning thirst.

The night passed tranquilly—too tranquilly. The Doctor did not sleep.

CHAPTER XVIII.

A little Philosophy.—A clouded Horizon.—In the midst of a Fog.—The unexpected Balloon.—Signalling.—Likeness of the "Victoria."—Palm Trees.—Traces of a Caravan.—Wells in the Desert.

NEXT day brought the same cloudless sky, the same stillness—not a breath of wind! After rising to a height of five hundred feet, the motion of the "Victoria" towards the west was scarcely perceptible.

"We are in the midst of the desert," said the Doctor. "Look around at the immensity of sand! What a terrible sight! What a singular dispensation of nature! In the land we have left to the east an excess of vegetation, here a parched and sandy desert, and both in the same latitude and under the same beams of the sun."

"The wherefore, my dear Samuel, does not give me any uneasiness, but very truly the fact does; and just now that is decidedly the more important."

"It is not a bad plan to philosophise now and then, Dick; it can't do any harm."

"Philosophise! Nothing could be better. We have plenty of time for it, for we are scarcely moving; the wind has completely died away."

"I don't think that will last," said Joe; "I can see a belt of clouds in the east."

"Joe is right," replied the Doctor.

"Good," said Kennedy. "Can we bring your cloud over here, with wind and rain enough to throw us on our faces?"

"We shall soon see, Dick—very soon!"

"This is Friday, sir; and I greatly distrust Fridays."

"Well, I hope that this very day you will have to recall your prediction."

"Do you dread the heat of the sun on the balloon?" asked Kennedy of the Doctor.

"No; the gutta-percha with which the silk is covered, will bear a much higher temperature; that in the interior has been exposed to the gas, heated sometimes as high as a hundred and fifty-eight degrees, and the balloon does not seem to have suffered."

"A cloud! a real cloud!" cried Joe, whose piercing eyes beat all glasses.

And, indeed, above the distant horizon a thick belt of clouds was slowly rising. It looked like a lot of little clouds heaped one upon the other, each keeping its shape distinct, whence the Doctor concluded that there was no wind in connection with their mass.

It was eight o'clock when these clouds first appeared, but it was eleven before they reached the sun, and hid her behind their dark curtain; at

the same moment, the lower edge of the clouds left the horizon, which appeared like a brilliant streak of light.

"This single cloud," said the Doctor, "will, I fear, be of no service to us. Look at it, Dick; it has not altered its shape since morning."

"I don't believe there is either wind or rain there—for us, at least."

"I fear not; it still keeps at too great a height."

"Well, then, Samuel, how would it do to go after this cloud which won't burst over us?"

"I am afraid that won't be of much use; we shall be put to a considerable expense of gas, and consequently of water. But in our position we must neglect nothing; we will ascend."

The Doctor applied himself to the furnace, and speedily the gas expanded and the balloon ascended. At fifteen hundred feet the cloud was met with, and the balloon entered a kind of thick fog, and was kept at that elevation; but there was not the slightest sign of wind, and the misty fog seemed to possess no humidity; objects thoroughly exposed to it were hardly even damp. The "Victoria," enveloped in this vapour, may have possibly travelled a little more quickly, but that was all.

The Doctor was mentioning with sadness the nearly useless results attained by their manœuvre, when he heard Joe cry, in accents of the most lively surprise :—

"Oh, by Jove!"

"What is it, Joe?"

"Oh, sir, oh; Mr. Kennedy, here's a sight!"

"What is there?"

"We are not alone! Here are some interlopers who have stolen our invention!"

"Has he gone mad?" said Kennedy.

Joe looked like a statue of stupefaction; he stood quite still.

"Can the sun have deranged the brains of this poor fellow?" said the Doctor, turning round. "What did you say to me?" he asked.

"Look there, sir!" cried Joe, pointing into space.

"By Saint Patrick!" cried Kennedy, in turn; "this is incredible. Samuel, Samuel, look here!"

"I see," said the Doctor, quietly.

"Another balloon! Other travellers than ourselves!"

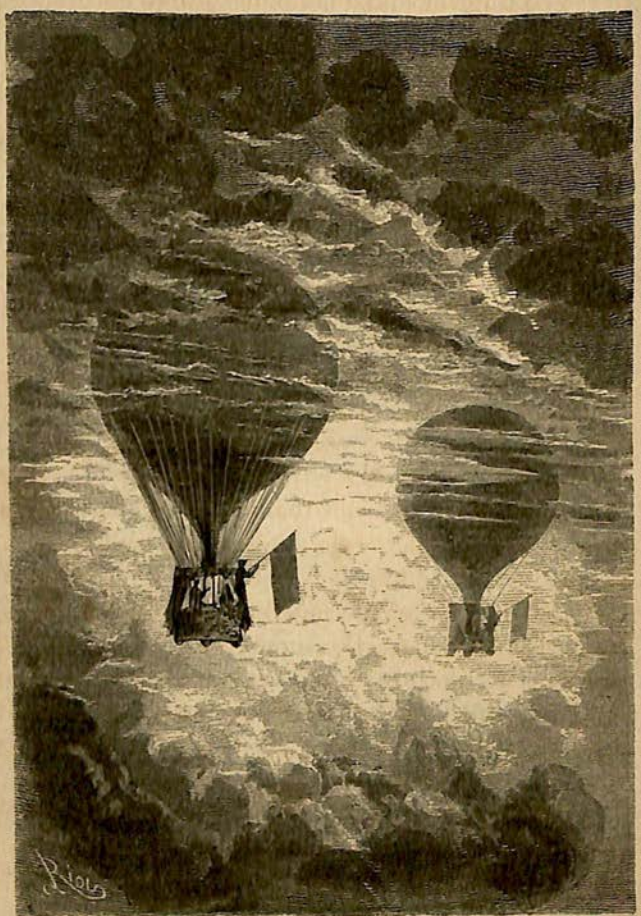
And there, two hundred feet off, a balloon floated in the air with its car, and its travellers, and followed exactly the same route as the "Victoria."

"Very well," said the Doctor; "we must make some signals to them. Take the flag, Kennedy, and let us show our colours."

"What does that matter?" asked Dick.

"They are monkeys," cried Joe; "they are imitating us!"

"It only means, my dear Dick," said the Doctor, laughing, "that you made the signal yourself, that it is we ourselves who are in that second car, and that that balloon is no other than our "Victoria."



An unexpected Companion.

"You'll never make me believe that, sir!"

"Get up on the edge of the car, Joe, and wave about your arms—you will see."

Joe obeyed, and found his gestures exactly and instantly reproduced.

"It is only the effect of a mirage," said the Doctor, "and nothing else; a simple optical phenomenon. It is due to the unequal rarefication of strata of air, and that is all."

"'Tis marvellous!" said Joe, enlarging his experience of the mirage by a free use of his arms.

"What a strange sight!" said Dick. "I am delighted to see our brave 'Victoria!' She looks uncommonly well, and has a really majestic appearance."

"You have very well explained all this in your own way, sir; but it is a wonderful sight, all the same."

Gradually the image faded away; the clouds rose to a greater height, leaving the "Victoria," which did not attempt to follow them, and at the end of an hour they had quite disappeared. The wind, scarcely to be felt, became even fainter. In despair, the Doctor approached the earth.

The travellers, whom the incident of the mirage had startled from their preoccupied thoughts, relapsed into sad forebodings; their sufferings increased by the insupportable heat.

About four o'clock, Joe announced some object standing out in relief on the immense plateau of

sand, and soon after was able to state that two palm trees were at no great distance.

"Palm trees! Then there is a fountain! there are wells!" cried the Doctor.

He seized a glass, and assured himself that Joe's eyes had not deceived him.

"At last," he kept repeating, "Water! water! and we are saved! for if we do travel slowly, we are always advancing, and shall finish by getting there."

"Ah! sir, if one could take a drink at once: the air is suffocating."

"Drink, my lad."

Nobody asked better; a pint a piece was speedily swallowed, and that left them only three pints and a half.

"Ah, that's better," said Joe. "How good it is! I never drank beer that could come up to it."

"One of the advantages of privation," replied the Doctor.

"Not a bit," said Dick. "I never wish to find out the delights of a drink of water at the price of being deprived of it."

At six, the "Victoria" was over the palm trees. They were two skeleton trees, miserable, withered; two spectres of trees, without a leaf: more dead than living.

The Doctor contemplated them with terror.

Beneath lay the scattered stones of a well; but these stones, calcined by the rays of the tropical

sun, were falling into dust. No signs anywhere of water !

The Doctor's heart sank within him, and he was about to share his fears with his companions, when their exclamations attracted his attention. As far as the eye could reach westward, lay one long line of whitened bones ; remains of skeletons lay around the fountain. A caravan pushed through thus far, marking its track with the dying and the dead. The weakest had sunk one by one on the sand, the strongest had reached the brink of the long-sought-for well, only to find a horrible death. Our travellers grew pale at the sight.

"Do not let us descend," said Kennedy ; "let us get away from this hideous sight. There is not a drop of water to be got there."

"No, no, Dick ; we must have a clear conscience. It will do as well to pass the night here as elsewhere. We will search these wells to the bottom ; there has been a spring here, and perhaps we may be able to find something of it."

The "Victoria" grounded, and Kennedy and Joe put as much sand into the car as made up for the weight of the travellers. They ran to the well, and got into the interior by an old ladder, which crumbled into dust under them. The spring seemed to have been dried up for many years. They dug in the dry and friable sand—of all sands the most arid ; but no trace of water rewarded their efforts. The Doctor saw them ascend to the surface of the

desert, sweating, baffled, covered with the fine dust, beaten, discouraged, and given over to despair. He understood the uselessness of their search; he had expected it, and said nothing. He felt that to start at such a moment he would require the courage and energy for all three.

Joe picked up the fragments of a tough leathern bottle, and dashed them in his rage among the bones that everywhere strewed the ground.

During supper, not a word was spoken; they even ate with repugnance.

But after all, they had not yet in sad truth endured the torments of thirst, and should not have despaired for the future.

CHAPTER XIX.

The Doctor's Reflections.—A despairing Search.—The Furnace extinct.—The Desert.—A Night Walk.—Solitude.—A Break-down.—Joe's Projects.—A Day longer.

THE distance travelled by the "Victoria" the preceding day did not exceed ten miles, at a cost of a hundred and sixty-two cubic feet of gas. On Saturday morning the Doctor gave the signal for starting.

"The furnace can only be kept going six hours longer," said he. "If in six hours we find neither well nor spring, Heaven only knows what will become of us."

"There's very little wind this morning," said Joe, adding, as he saw how sad the remark made his master, "but no doubt it will get up presently."

Vain hope! It was a settled calm. One of those calms which, in tropical seas, hold vessels motionless in the "doldrums" for weeks. The heat became intolerable, and the thermometer, in the shade under the tent, stood at a hundred and thirteen degrees. Joe and Kennedy, stretched beside each other, sought, if not in sleep, at least in a kind of torpor, forgetfulness of the situation.

A compulsory inactivity made their leisure hard to bear.

That man is most to be pitied who cannot find an escape from his thoughts in work or occupation of some kind. But in this case there was nothing to do, no more to attempt; they could only submit to their fate without the power of bettering it. The sufferings of thirst began to make themselves cruelly felt. Brandy, far from assuaging this imperious need, on the contrary increased it, and well entitled it to the name of "tiger's milk," which the natives of Africa have given to it. There remained barely two pints of a warmish liquid; and though each one regarded with covetous eyes these precious drops, no one dared wet their lips with them. Two pints of water in the midst of the desert!

Again the Doctor, plunged in reflection, asked himself if he had acted with prudence? Had he not better have treasured the water he had decomposed in perfect loss to keep the balloon afloat? He had come some part of the road, certainly; but could he advance any farther on it? Sixty miles back, what would it have mattered if water had failed him? The wind, when it did rise, would have blown there as well as here, at least, if it came from the east. But hope urged the Doctor forward. And yet these two gallons of water, expended in vain, would have sufficed for a nine days' halt in the desert. And what changes might

not have happened in nine days! Perhaps, also, if the water had been preserved, he might have been able to ascend by throwing out ballast, even if he had to lose gas in order to descend again. But the gas of his balloon! It was its life-blood! It was its very life itself! A thousand such reflections filled his head, which he held in his hands for whole hours without raising it.

At ten in the morning the Doctor said to himself, "We must make a last effort. We must try, for the last time, to find a current which will bear us on. We must risk our last resources." And while his two companions slept he raised the hydrogen to a high temperature. The balloon filled under the expanded gas and rose straight under the perpendicular rays of the sun. The Doctor sought in vain for a breath of wind from a hundred feet high to five thousand—the spot he had left remained exactly beneath him; an absolute calm seemed to reign as far as the last limits of respirable air. At last the water for the gas was exhausted; the furnace fire went out; Bunsen's battery ceased to act, and the "Victoria," collapsing, sank gently to the sand, the cradle lighting again on the very marks it had implanted.

Mid-day. The observations of the Doctor made them out to be in longitude 19° 35′, latitude 6° 51′—nearly five hundred miles from lake Tchad, and more than four hundred from the western coast of

Africa. On touching ground Dick and Joe came out of their heavy torpor.

"We are stopping," said the Scot.

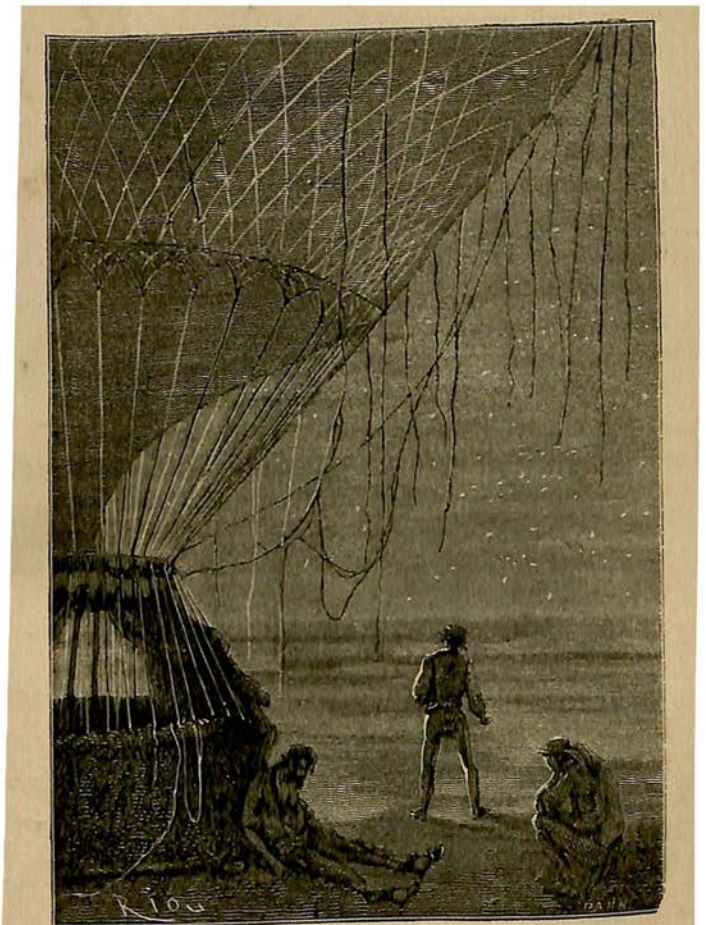
"We must," replied the Doctor, solemnly.

His companions understood him. Having followed a constant depression of the ground, they had now reached a place where the ground was at the same level as the sea, and consequently the balloon was in exact equilibrium at the ground and remained immovable. The weight of the travellers was replaced by an equivalent one of sand, and they landed. Each was absorbed in his own thoughts, and for several hours not a word was uttered. Joe produced the supper of biscuit and pemmican, which was hardly touched, and a gulp of hot and disagreeable water completed the melancholy repast. That night no watch was kept; but no one slept. The heat was stifling. Next day there remained but half a pint of water, which was placed in reserve, and they resolved not to touch it but in the last extremity.

"I am suffocating," said Joe, shortly after. "The heat redoubles. Nor need that surprise one—one hundred and forty degrees."

"The sand burns as if it came out of a furnace," replied Dick, "and not a cloud in the sky; this will drive us mad."

"Do not let us despair," said the Doctor; "these frightful heats are invariably succeeded, in this latitude, by tempests, which come on with the



Night in the Desert.

rapidity of lightning. Notwithstanding the terrible serenity of the sky, an hour may produce a great change."

"Ah, when shall we see a sign of it?" said Kennedy.

"Look!" cried the Doctor, "the barometer already shows a slight inclination to fall."

"May heaven hear you! But, then, here we are fixed to the ground, and as powerless to rise as a bird with its wings broken."

"With this difference, my dear Dick, that our wings are intact and, I hope, will yet serve us well."

"Wind, wind!" cried Joe. "Wind that would take us to a stream or a well, and we should want for nothing. We have plenty of food and, with water, could wait a month without suffering. But thirst,—it is a cruel thing!"

Thirst, and also the incessant contemplation of the desert, tires the mind. There is not a dip in the ground, not a grain of sand, not a pebble to catch the eye. The terrible plain is heart-breaking, and brings on the illness called the desert sickness. The unvarying blue arch of the heavens, and the yellow immensity of the sand, end by frightening one. In that burning atmosphere the heat appears to vibrate, as over a burning fire; the spirit sinks in despair at the thought that there is no limit to the desert—like eternity in its immensity.

Unhappy wretches, deprived of water under that

torrid temperature, also begin to show symptoms of hallucination; their eyes stand out from their heads, and their sight becomes troubled. When night came the Doctor determined to conquer this uneasy feeling by a rapid walk. He resolved to walk about on that plain of sand for some hours; not to look for anything, but only to walk.

"Come along," said he to his companions; "believe me, it will do you good."

"Impossible," said Kennedy. "I could not go a step."

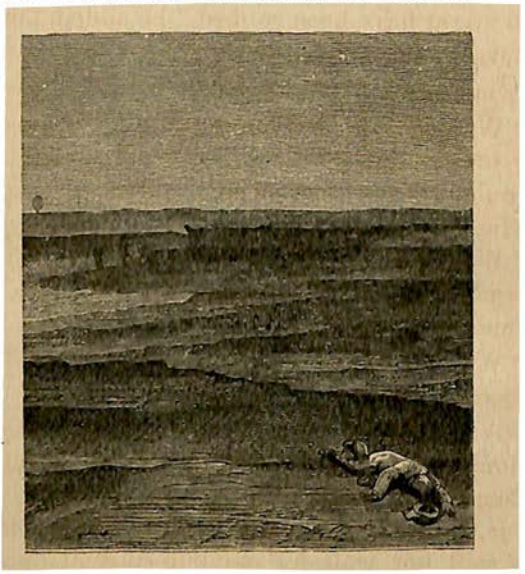
"I had much rather sleep," said Joe.

"But sleep or rest will be fatal to you, my friends. Fight against this torpor. Come along—come along!"

The Doctor could make nothing of them, and started alone through the star-lighted clearness of the night. His first steps were made with difficulty—the steps of a man weakened and unused to walking; but he knew well that the exercise would be beneficial. He had advanced several miles to the west, and already his spirit was cheered and strengthened, when suddenly he was seized with vertigo. He believed he had fallen into an abyss, he felt his knees give way, the vast solitude terrified him, he was a mathematical point, the centre of an infinite circumference—that is to say—nothing!

The "Victoria" had disappeared entirely in the shadow. The Doctor was attacked by an insur-

mountable fear — he; the fear-defying traveller! He wished to retrace his steps, but in vain; he called out, but not even an echo replied, and his voice was lost in space, like a stone thrown into a fathomless gulf. He fell fainting on the sand, in the midst of the awful silence of the desert!



At midnight he recovered consciousness in the arms of his faithful Joe, who, alarmed at the prolonged absence of his master, had followed his footsteps imprinted in the sand, and had found him in a swoon.

"What has been the matter with you, sir?" he asked.

"Nothing, Joe—a momentary weakness, that is all."

"It may be nothing, sir; but rise, lean upon me, and let us regain the 'Victoria.'"

The Doctor, taking Joe's arm, retraced his steps.

"It was imprudent of you, sir, to go so far away. You might have been robbed," he added, laughing. "But, sir, let us speak seriously."

"Say on—I listen to you."

"We must absolutely determine on some course: our present position can last but a day or two more, and if no wind springs up, we are lost."

The Doctor made no reply.

"Well, sir, some one must devote himself to the common good, and it is quite natural that it should be me!"

"What are you going to say? What is your project?"

"A very simple one, sir; I will take some provisions and walk straight before me till I reach some place or other, which I can't fail to do. Meanwhile, should heaven send you a favourable wind, you will not wait for me, but start at once. On the other hand, if I should come to a village, I shall explain my business by some Arabic words which you will write down for me, and I shall bring you help, or leave my skin there! What do you think of my plan, sir?"

"It is madness—but worthy of your brave heart, Joe. It is impossible. You shall not leave us."

"But, sir, something must be tried, and my plan could not harm you in any way, since, I repeat, you are not to wait for me; and very likely, too, I should succeed."

"No, no, Joe; we will not separate; that would be an additional grief. It was written that it was to be so, and possibly it was also written that it was to be otherwise afterwards: so, wait with resignation."

"So be it, sir; but I warn you of one thing, I give you a day—I shall not wait any longer. This is Sunday, or rather Monday, for it is one o'clock in the morning; if we don't start on Tuesday, I shall attempt the adventure—that is settled."

The Doctor made no answer, but, returning to the car, took his place beside Kennedy, who was lying in such perfect silence that it could scarce be sleep.

CHAPTER XX.

Frightful Heat.—Hallucinations.—The last drops of Water.—A Night of Despair.—Attempt at Suicide.—The Simoon.—The Oasis.—Lion and Lioness.

THE Doctor's first care in the morning was to look at the barometer; it had hardly fallen any appreciable distance.

"Nothing!" said he to himself. "Nothing!"

He left the car to look at the weather—the same heat—the same clear and implacable sky!

"Must we then despair?" cried he.

Joe said not a word; absorbed in his idea, and meditating on his project of exploration. Kennedy was very ill when he rose, and a prey to disquieting over-excitement. He suffered horribly from thirst; his swollen tongue and lips could with difficulty articulate a sound.

There were still a few drops of water left; every one knew it, every one thought of it, and was attracted by it; but no one dared make a step. These three companions, these three friends, looked at each other with haggard eyes, with a feeling of brutal greed, which betrayed itself most in Ken-

nedy: his powerful organisation succumbed more quickly to these intolerable privations. All day long he was a prey to delirium; he walked to and fro, uttering hoarse cries, biting his fingers as if ready to tear open his veins to drink the blood.

"Ah!" cried he, "Land of Thirst! you might have been well called the Land of Despair!" He then fell prostrate, and there could only be heard the faint sound of his breath as it issued from his parched lips.

When evening fell, Joe was in his turn attacked by delirium; he imagined the vast desert of sand a vast lake of clear and sweet water, and more than once threw himself on the burning plain, attempting to drink, and rising with his mouth full of the fine dust.

"Curses on you," he cried, "this is salt water!"

Then, whilst the Doctor and Kennedy lay motionless, he was seized with an invincible desire to drain the little water left in reserve. The thought mastered him; crawling on his knees he approached the car, his eyes brooding over the bottle, in which he could see the liquid, and casting a look on it which overcame all his power of resistance, he seized the bottle and carried it to his lips. At that instant the words—"Water! Water!" were uttered in an heart-breaking accent. It was Kennedy, who had crawled to his side; he begged for it piteously, he knelt, he wept. Joe, weeping also, handed him the bottle, which he drained to

the last drop. Joe did not hear him; like Kennedy, he had fallen back on the sand.

How that night of horror passed, none of them knew. On the morning of Tuesday the miserable men felt their very limbs drying up under the fierce rays of the sun. When Joe tried to rise he could not. He was unable to put his project in execution. He looked around him. In the car, the Doctor, utterly crushed, sat with his arms crossed on his chest, and his eyes fixed on some imaginary point in space with idiotic fixity: Kennedy was frightful, he rolled his head from side to side like a wild beast in a cage. Suddenly the hunter's eye caught sight of his rifle, the but of which rested on the edge of the car.

"Ah!" cried he, rising by a superhuman exertion. He rushed to the weapon—distracted—mad—and placed the muzzle of it to his mouth.

"Stop! Stop!" cried Joe, throwing himself upon him.

"Let go! get off!" cried the Scot, his voice rattling horribly in his throat.

The two fought with desperation.

"Let go, or I'll kill you!" repeated Kennedy.

But Joe held on to him with all his strength, and they fought thus, without the Doctor appearing to see them, for nearly a minute. In the struggle the rifle suddenly went off: at the sound of the report, the Doctor rose to his feet like a spectre, and looked around him. In an instant his look became

animated; his arm was extended towards the horizon, and, with a voice which had nothing human in it, he cried—

"There! look there!"

So energetic was his action that Kennedy and Joe separated, and both looked where he pointed.

The plain resembled a sea driven to fury by a tempest; waves of sand rolled over and over each other in the midst of an enormous cloud of dust; an immense column approached from the south-east, turning round and round with extreme rapidity; the sun disappeared behind an opaque cloud, whose shadow he projected as far as the "Victoria;" the grains of sand came on as if liquid, and the rising sea rapidly approached them.

The bright light of hope shone in the Doctor's eyes.

"The simoon!" he cried.

"The simoon!" repeated Joe, without understanding it.

"So much the better," cried Kennedy, with all the rage of desperation. "We must die now!"

"So much the better," replied the Doctor, "for, on the contrary, we shall live!"

And he began rapidly throwing out the sand that ballasted the car.

His companions understood him at last, joined him, and took their seats by his side.

"Now, Joe," cried the Doctor, "out with fifty pounds of your ore."

Joe did not now hesitate to do as he was bid.

The balloon rose.

"It was time," said the Doctor.

On came the simoon with the speed of lightning. A little more and the "Victoria" would have been crushed, torn to bits, annihilated. The enormous pillar of sand had reached it; it was covered with a perfect hail of sand.

"Over with the ballast, Joe!" cried the Doctor.

"There it goes," he replied, throwing over an enormous mass of quartz.

The "Victoria" rose rapidly higher than the sand storm, but, caught in that of the wind, was carried along with incalculable speed above the waves of flashing dust.

Neither the Doctor, Dick, nor Joe spoke; they could only look on, but they hoped, and were besides refreshed by the wind of this terrible hurricane.

At three the storm abated, then ceased; the sand, falling back, formed innumerable little sand-hills. The sky was again clear.

The "Victoria," having again become motionless, floated in view of an oasis—an island covered with green trees, and set like a gem in that ocean of sand.

"Water! there is water there!" cried the Doctor.

Immediately opening the upper valve, the hydro-

gen escaped, and the balloon grounded gently at two hundred paces from the oasis.

In four hours our travellers had made a voyage of two hundred and fifty miles. The car was soon ballasted, and Kennedy, followed by Joe, jumped to the ground.

"Your guns!" cried the Doctor; "your guns! and take care!"

Dick caught up his rifle; Joe seized a double-barrel. They quickly reached the trees and plunged into the fresh verdure, which promised them abundant springs, without noticing the large foot-prints, whose fresh traces everywhere marked the humid soil.

On a sudden a loud roar rang out, not twenty paces from them.

"The roar of a lion!" said Joe.

"All the better," said the exasperated hunter. "Have at him!"

"Gently, Mr. Dick, gently; on the life of one, depends the lives of all."

But Kennedy did not hear him; he advanced, his eye blazing, his rifle ready, terrible in his boldness.

Under a palm tree an enormous lion, with a long and thick black mane, stood ready to attack the new-comer. The instant the hunter came in sight he made his spring; but ere he lighted a ball pierced his heart—he fell dead.

"Hurrah! hurrah!" cried Joe.

Kennedy rushed towards the wells, slipping over the moist tracks, and threw himself over a fresh spring, in which he eagerly moistened his lips. Joe followed his example, and nothing was to be heard but the lappings of tongues, as of animals slaking their thirst.

"Let us take care, Mr. Dick," cried Joe, drawing breath. "Do not let us make a bad use of this."

Dick, without replying, kept on drinking. He plunged his head and hands into the blessed water. He was as if intoxicated.

"But, Dr. Fergusson," said Joe.

The word recalled Kennedy to himself; he filled a bottle he had brought, and darted back over the tracks leading to the wells. But judge of his stupefaction! A body—opaque, enormous—closed the opening. Joe, who followed Dick, had to recoil with him.

"We are shut in!"

"Impossible! What can make you say——"

Dick did not finish. A terrible roar let him understand with what new enemy he had to deal.

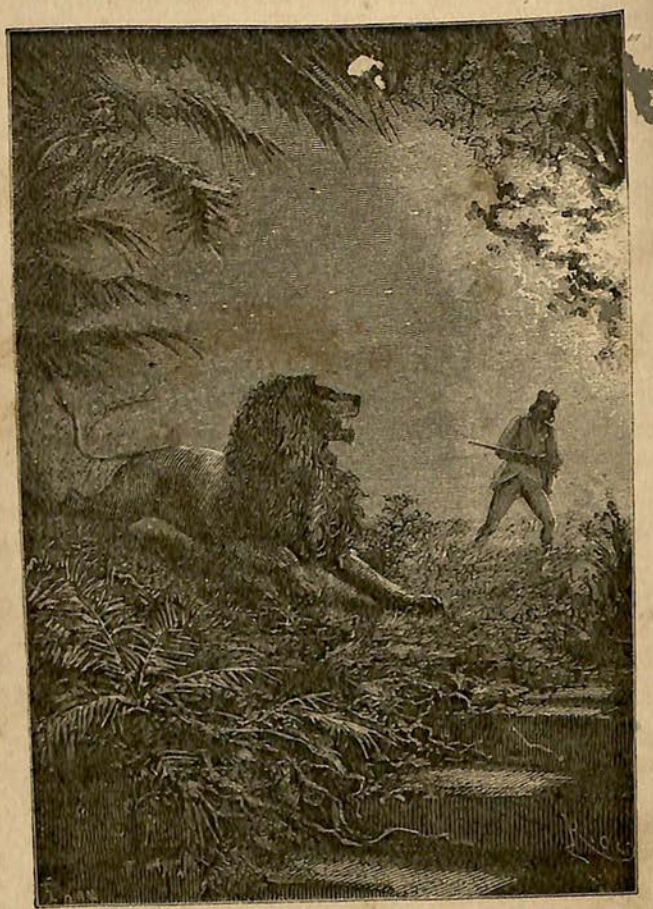
"Another lion!" cried Joe.

"No, a lioness—ah! your cursed heart; wait a bit!" said he, quickly reloading his rifle.

An instant afterwards he fired, but the animal had disappeared.

"Forward!" cried he.

"No, Mr. Dick, no; you did not kill her that shot, her body would have rolled in here. She is



Noble Sport.

ready out there to spring upon the first of us who appears, and he will certainly be killed."

"What's to be done? We must get out; the Doctor is waiting for us."

"Attract the brute. Take my gun, and give me your rifle."

"What's your idea?"

"You shall see."

Joe, taking off his shirt, fastened it to the end of the weapon, and presented it as a bait above the opening. The furious beast darted upon it; Kennedy waited for her in the passage, and broke her shoulder with a ball; the lioness, roaring loudly, fell down the steps, upsetting Joe, who already seemed to feel her enormous claws, when a second report was heard, and the Doctor appeared at the opening, his smoking gun still in his hand. Joe quickly rose, jumped over the beast's body, and handed his master the bottle of water. To carry it to his lips and half empty it was for the Doctor the work of a moment. And the three travellers thanked Providence from the bottom of their hearts for their miraculous preservation.

CHAPTER XXI.

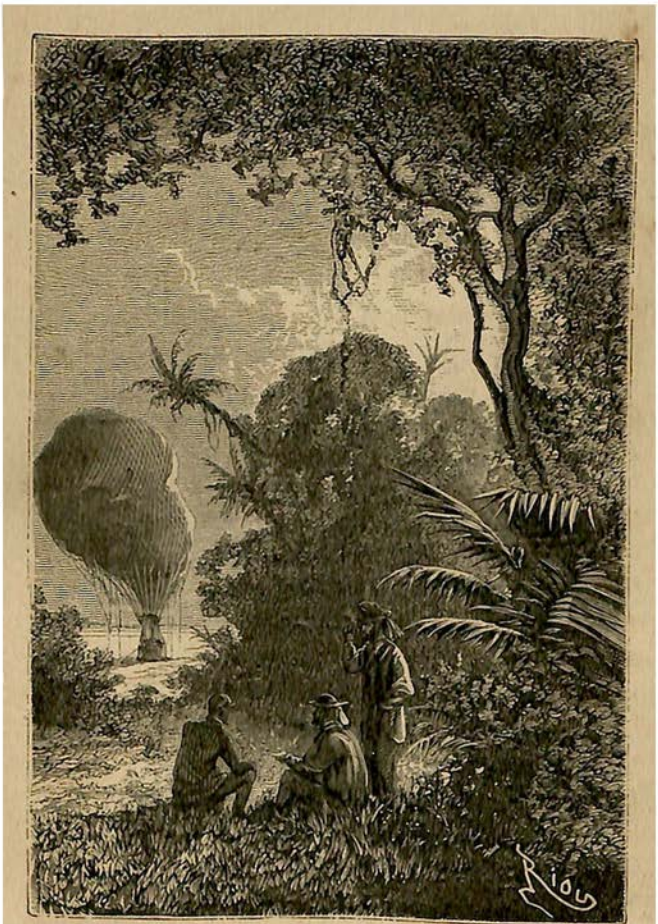
A delicious Evening.—Joe's Cookery.—On raw Flesh.—James Bruce.—Bivouac.—Joe's Dreams.—The Barometer falls; rises.—Preparations for a Start.—The Hurricane.

THE evening was charming, and was passed under the fresh shades of mimosas, after a cheerful repast, at which neither tea nor grog was forgotten.

Kennedy had thoroughly examined the little domain; he had searched through every bush. Our travellers were the only living beings in this terrestrial paradise. Covering themselves up, they lay down, and passed a quiet and peaceable night, which brought them forgetfulness of all their past misfortunes.

Next day, the 7th of May, the sun shone in all her brightness, but her beams could not penetrate the dense shade of the foliage, and as there was plenty of provisions the Doctor resolved to wait in that place for a favourable wind.

Joe had brought his portable kitchen with him, and gave himself up to a lot of culinary combinations, in which he expended water with a careless prodigality.



A Delicious Evening.

"What a strange succession of pains and pleasures," cried Kennedy; "this abundance after such privation; this luxury succeeding to so much misery! Oh! I have been very near going mad."

"My dear Dick," said the Doctor to him, "if it had not been for Joe, you would not be here in a condition to discourse upon the instability of human affairs."

"Brave friend!" said Dick, holding out his hand to Joe.

"It was nothing at all," said Joe. "I only trust that you will never have an opportunity of doing the same for me."

"Poor human nature," said the Doctor, "to fight for so little!"

"For so little water, you should say, sir; and that is the most necessary thing in life!"

"True, Joe; and men deprived of food live much longer than those deprived of water."

"I believe it, sir; besides, we can eat anything we meet in case of need, even if it does not quite agree with us!"

"Savages are not often at a loss," said Kennedy.

"Yes; but there are savages who always eat raw flesh—a horrible custom!"

"The idea is so disgusting," said the Doctor, "that no one believed the accounts given by early travellers in Africa, who reported that there were people there who invariably ate raw flesh; in short, every one refused to admit that such could be fact.

It was under these circumstances that a singular adventure befell James Bruce."

"Please tell us the story, sir," said Joe, stretching himself luxuriously on the cool grass; "we have plenty of time to listen to it."

"Willingly. James Bruce was a countryman of yours, Dick, who travelled throughout Abyssinia during the years 1768 to 1772, and penetrated as far as Lake Tyana, searching for the source of the Nile. Returning to England, he published his travels in 1790. His accounts were received with perfect incredulity. The habits of the Abyssinians were so opposed to our own manners and customs, that no one would believe a word of Bruce's. Amongst other statements, Bruce had said that the natives of Eastern Africa ate raw flesh. This raised everybody against him. It was easy enough to say so, since no one had ever gone there to see! Bruce was both hot-tempered and courageous, and these doubts of the truth of his stories gave him great annoyance. One day, in Edinburgh, a gentleman present was making Bruce's statements a matter of jest; and referring to the story of the raw flesh, said it was neither possible nor true. Bruce said nothing, but went out, and came back a short time after with a raw steak, powdered over with salt and pepper in the African fashion. 'Sir,' said he, advancing to the gentleman who had been making fun of his travels, 'in doubting a fact which I have advanced, you have done me a serious

injury. In believing it impracticable you quite deceive yourself; and to prove this to every one present, you shall eat up that raw steak or give me satisfaction.' The gentleman was afraid, and, with many wry faces, ate the steak. With the utmost coolness, Bruce added: 'In admitting even that the thing is not true, sir, you can never, at least after this, say that it is impossible.'"

"Well said," cried Joe. "And if, on our return to England, any one casts a doubt on our voyage——"

"Well, what will you do, Joe?"

"Make him eat the pieces of the 'Victoria' without salt or pepper."

A hearty laugh followed Joe's intentions.

The day passed in agreeable repose; and with returning strength came back hope, and with hope courage and boldness.

Joe would never have wished to leave the enchanted spot—it was the very kingdom he had pictured in his dreams—he felt quite at home, and got from the Doctor the exact position of the oasis, which he entered in his note-book with the utmost gravity: longitude 15° 43′, latitude 8° 32′.

Kennedy had but one regret—that there was nothing to shoot in that miniature forest. To suit him, the place wanted some wild beasts.

"You have a short memory, Dick. Were there not a lion and a lioness?"

"Bah!" cried he, with the disdain of your real

hunter for the spoils of the chase after they are got. "In fact, the only thing about the matter is that, their presence here would lead us to believe that we are not far from fertile districts."

"Slender proof, Dick. These animals, when pressed by hunger or thirst, will travel very considerable distances. During the coming night we must watch with more vigilance than ever, and light fires as well."

"At this temperature, sir?" said Joe. "Still, since you say so, it shall be done, pity as it is to burn this wood, which has been so useful to us."

"We must be very careful not to set the wood on fire. Think of other travellers, who may one day find this refuge in the midst of the desert."

"I shall take care, sir. But do you think that this oasis is known?"

"Certainly, it is a halting-place for the caravans which frequent the interior of Africa; and you might not find a visit from one of them very pleasant."

"Are there any more of these frightful Nyam-Nyams here, sir?"

"No doubt. That is the name of the whole population—of all the tribes; and, in the same description of climate, their customs are very likely to be similar."

Turning this over in his mind, Joe made up his fires of pieces of wood broken up as small as pos-

sible. The precautions were fortunately unneeded, and each in his turn slept soundly.

The fine weather lasted all next day, not a breath of wind could be felt, and the balloon remained motionless, without even oscillating.

The Doctor began to feel uneasy again. If their voyage was to be thus prolonged, their supply of provisions would give out. Were they, then, to die of hunger, after nearly succumbing to lack of water?

A glance at the barometer reassured him, it was sensibly falling, there were evident signs of an approaching change in the atmosphere, and he determined to begin his preparations for a start on the first opportunity. The two water-cases, for making the gas and for drinking, were filled; the balance of the balloon was readjusted; and Joe had to throw out a notable portion of his precious ore.

With the return of health, Joe's ambitious ideas had again taken possession of him, and he made a good many wry faces before obeying the Doctor, who had at last to tell him plainly he could not carry such a weight, and that the choice lay between water or gold. That settled the matter, and Joe's nuggets were thrown on the sand.

"There they lie for some one who will come here after we have gone, and who will be rather astonished to find their fortune in such a place."

"What a joke if some scientific traveller were to all in with these specimens!" said Dick.

"It would surprise him, no doubt, and he would write several folios on the subject. We should then hear of the marvellous discovery of auriferous quartz in the midst of the sands of Africa."

"And Joe would have been the cause of it!"

The idea of such a mystification delighted Joe, and helped to console him for his loss.

Vainly all day did the Doctor wait for a change in the weather. The temperature rose, and even under the shady foliage of the oasis the heat was insupportable: the thermometer stood at 149° in the sun. This was the greatest heat they had yet experienced.

Joe arranged the bivouac, as on the previous night, and during the Doctor's and Kennedy's watches nothing occurred; but about three in the morning, Joe being on the look-out, the temperature suddenly fell, clouds covered the sky, and the darkness increased.

"Up, gentlemen!" cried Joe, waking his two companions. "Here comes the wind!"

"At last!" cried the Doctor. But, on looking round, he exclaimed: "It is a tempest! To the 'Victoria!'—to the 'Victoria!'"

It was time to get there!

The "Victoria" bent before the violence of the hurricane, and was dragging the car along the sand. Had any of the ballast been by any chance thrown out, the balloon would have been off, and all possibility of ever seeing it again for ever lost.

But Joe, running at the top of his speed, caught the car, and held on to it, whilst the balloon was prostrate along the sand, in great danger of being torn to pieces.

All got in, the Doctor set the furnace going, and Joe threw out the excess of ballast. The travellers

cast a last look at their pleasant resting-place, where the trees were bending beneath the tempest; and catching the east wind, at a height of two hundred feet, disappeared in the darkness of the night.

CHAPTER XXII.

Signs of Vegetation.—A Fantastic Idea.—Magnificent Country.—The Kingdom of Adamova.—Burton and Speke's Explorations joined to those of Barth.—The Atlantika Mountains.—The River Benoué. —Town of Yola.—Bagélé.—Mount Mendif.

FROM the moment of their departure our travellers were carried along with immense rapidity. It seemed as if they hastened to quit these deserts which had been so nearly fatal to them. About nine in the morning some signs of vegetation were caught sight of—a few blades of grass floating on that sea of sand, announcing to them, as to Christopher Columbus, the proximity of land, showed their green points between the scattered masses of flints, which formed, as it were, the rocks of that sandy sea. Through the haze the oulines of some hillocks could be seen on the horizon; but the monotony of the desert was disappearing. The Doctor hailed this new country with joy, and, like a sailor on the look-out, could scarcely help shouting—"Land ho!"

An hour later the continent displayed itself beneath their eyes, still rugged and savage, but less flat and bare, for here and there a few dwarfed trees showed themselves.

"We are at last in a civilised country?" asked Dick.

"Civilised, Mr. Dick! There's not an inhabitant to be seen."

"It will not be long before we do, at the rate we travel," observed the Doctor.

"Are we still in the country of niggers, sir?" asked Joe.

"Still, Joe; but shortly we shall come to the country of the Arabs."

"Arabs, sir; real Arabs with their camels?"

"No; no camels. These animals are very scarce, indeed almost unknown in these countries. You must go farther north to find them."

"That's annoying."

"Why, Joe?"

"Because if the wind was contrary we could make some use of them."

"How?"

"Only an idea I had, sir; that we might fasten them to the car and make them tow us along. What do you think of it?"

"My poor Joe, somebody else has had that idea before you; a French author, who—in a novel, it is true—makes some travellers *in* a balloon be towed by camels; but a lion makes his appearance, devours the camels, swallows the towing line, and hauls along in their stead,—and a lot more of it."

Joe, a little humiliated to find his idea had been used, as also his former idea about the eagles,

tried to think of an animal that could devour the lion, but not able to do so, took to examining the country.

A lake of no great extent now spread beneath them, surrounded by an amphitheatre of hills too small to deserve the name of mountains, between which numerous fertile valleys wound in and out, thickly covered with brushwood and trees of various descriptions. The bombax loaded the wind with the fine thistly-like down of its seeds; the strong perfume of the datura—the "kenda" of the Arabs—reached even to the "Victoria;" the papan tree, with its palmated leaves; the calabash tree, which produces the Soudan nut; the baobabs and bananas—all formed part of this rich and luxuriant inter-tropical Flora.

"What a magnificent country!" said the Doctor.

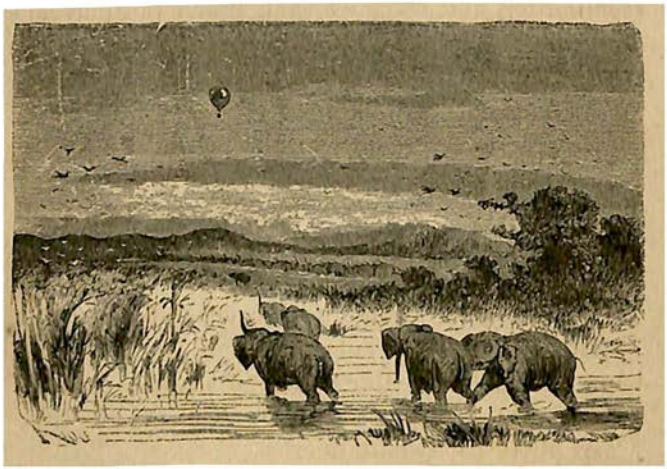
"There are some animals!" cried Joe. "Men are not far off."

"Ah, what splendid fellows! Look at these elephants! Can't we stop and have a little hunting?"

"How can we, my dear Dick, travelling with so strong a current as this? No; you must endure a new version of the tortures of Tantalus. You will be able to make up for it soon."

There was enough, indeed, to excite the imagination of a hunter. Dick's heart beat fast, and his fingers closed tightly round the stock of his rifle. The Fauna of the country equalled the

Flora. Wild cattle wallowed in the thick grass, which grew so high that they were entirely hid by it. Grey, black, and yellow elephants of enormous size, tore like a whirlwind through the forest, tearing down the trees, champing up the smaller branches, and breaking everything in their course of devastation. On the woody sides of the hills innumerable brooks ran in little cascades towards



the north, and in these hippopotami plunged about with frightful noise; whilst on the banks sea-cows twelve feet long displayed their fish-like bodies, with their enormous teats swollen with milk. It was altogether a wonderful menagerie in the midst of as wonderful an aviary, in which birds without number and of a thousand colours sparkled like gems between the tree-like plants. By this

prodigality of nature the Doctor recognised the Kingdom of Adamova.

"We are encroaching on modern discoveries now," said the Doctor, "and are taking up the track of former travellers, for, by a happy chance, we are about to join to the explorations of Burton and Speke those of Barth. We leave the line of discovery of our countrymen to follow that of a Hamburger, and soon we shall reach the extreme limit attained by that adventurous explorer."

"It seems to me," said Kennedy, "that between these two tracks of exploration there is a good bit of country, if I may judge by the length of the way we have come."

"It is easily reckoned. Take the map and look for the longitude of the northern point of Lake Ukéréoué reached by Speke."

"It is not far from the thirty-seventh degree."

"And the town of Yola, which we shall see this evening, and which Barth arrived at, where is that situated?"

"At about the twelfth degree."

"That made twenty-five degrees of sixty miles each, which will be fifteen hundred miles."

"A pretty long march on foot."

"It will be accomplished nevertheless. Livingstone and Moffat are continually marching towards the interior. The Nyassa which they have discovered is not very far distant from Lake Tanganayika which Burton reached. Before the end

of the century all these immense countries will certainly be explored."

"I am sorry," added the Doctor, looking at the compass, "that the wind takes us so far west, I should have liked a more northerly direction."

After twelve hours' voyaging the "Victoria" was over the borders of Nigritia. The first inhabitants of that land—the Arab Chouas—grazed large flocks of sheep, and led a nomadic life from place to place.

The towering summits of Mount Atlantika now rose above the horizon—a mountain which no European foot had ever trodden, and whose height is estimated at nearly eight thousand feet. The western slope of this chain determines the flow of all the waters of that part of Africa towards the ocean—they are the Mountains of the Moon of that region.

At last a real river appeared under the travellers' feet, and by the immense ant-hills in its neighbourhood, the Doctor recognised the Benoué, one of the great affluents of the Niger, the same which the natives have named "The Father of Waters."

"This river will one day become the natural means of communication with the interior of Nigritia. Under the command of one of our brave sailors the *Plciad* steamer has already ascended as high as the town of Yola, so we are now in a country that something is known about."

Numerous slaves were at work in the fields, engaged in the cultivation of sorgho, a sort of millet, which forms the principal article of food, who stared stupidly at the "Victoria," as she passed like a meteor.

That evening they stopped at forty miles from Yola. Before them, but at a great distance, rose the two needle-like cones of Mount Mendif. The anchors were thrown, and soon caught in the top branches of a lofty tree; but the wind was so strong that the balloon was blown almost horizontal, and the position of the car was at times extremely dangerous.

The Doctor never closed an eye all night, and several times was on the point of cutting the cable and letting the "Victoria" fly before the tempest; but at length a calm succeeded, and the oscillations of the balloon ceased to cause any uneasiness.

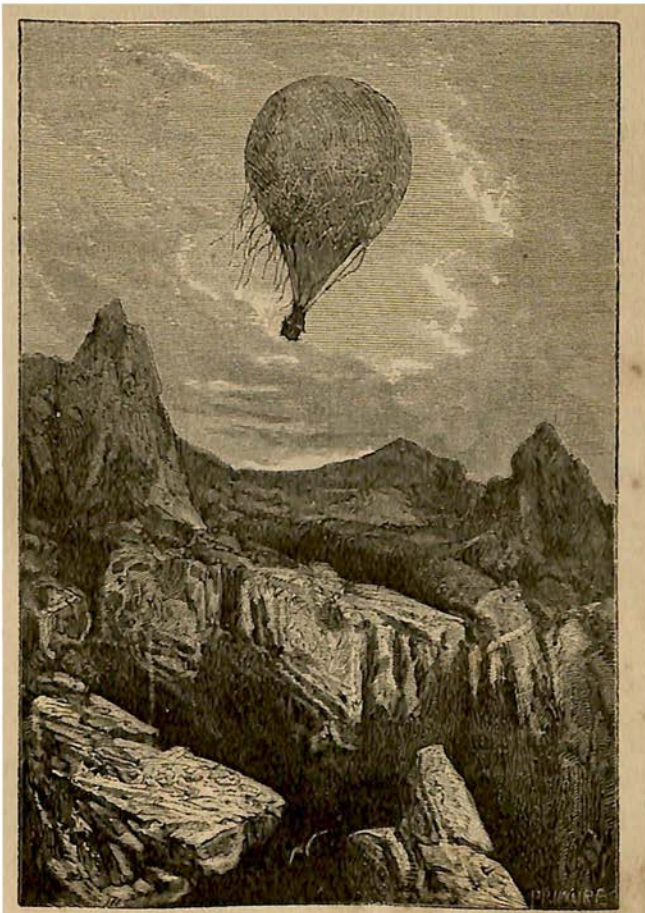
Next morning, though the wind had moderated it had shifted, and took them away from the town of Yola, which had just been rebuilt by the Foullannes, and which the Doctor was curious to see; but there was no help for it, and they bore off northwards and a little towards the east.

Kennedy wanted to halt and enjoy a little hunting, and Joe pretended that fresh meat was necessary; but the savage manners of the country, the attitude of the population, and some musket shots which had been fired at the "Victoria," determined the Doctor on continuing on his way.

This country over which they were travelling is the theatre of constant fires and massacres, where fierce and bloody battles are incessantly waged, and where the sultans reign over the different tribes in the midst of carnage. Numerous populous villages were seen in the midst of pastures, where the grass was lost among violet-coloured flowers; the huts, looking like immense beehives, were protected by strong thorny palisades. The wild and rugged nature of the hills, with their valleys, reminded Kennedy of the glens of his native Scotland.

Despite his efforts, the Doctor found his course bore north-east towards Mount Mendif, whose summits, hidden by clouds, separate the basin of the Niger from that of Lake Tchad. Soon after Mount Bagélé came in view, with its eighteen villages nestled in its valleys, like children in their mother's bosom, a magnificent sight for our travellers, who could take in the whole scene at a glance. The fields were generally covered with crops of rice.

At three o'clock they were opposite Mount Mendif, and there was nothing for it but to cross it. The Doctor raised the heat of the furnace, and the "Victoria" rose to a height of eight thousand feet. This was the greatest height attained during the voyage, and the temperature fell so low that they were all glad to wrap themselves in their rugs. The Doctor hastened to descend, for the balloon



The Crater of Mount Mendif.

was distended so much as to threaten to burst; but he had time to decide that the mountain was of volcanic origin, the deep abysses of extinct craters being everywhere visible, the sides of the mountain looking perfectly white, owing to the deposits of the innumerable birds which build in its recesses. At five, the "Victoria," sheltered from the winds of the south, gently glided down by the mountain slopes, and was made fast in a great clearing, far from any habitation. As soon as she touched ground, Kennedy sprang out, gun in hand, and soon had knocked over half a dozen wild ducks, and a kind of snipe, which Joe speedily cooked, and after a good supper, they enjoyed a calm night's rest.

CHAPTER XXIII.

Mosfeia.—The Sheik.—Denham, Clapperton, Oudney, Vogel.—The Capital of Loggoum.—Toole.—Becalmed over Kernak.—The Governor and his Court.—The Attack.—The Fiery Pigeons.

EARLY next morning they were off, feeling as much confidence in the "Victoria" as a sailor does in his ship. Terrible hurricanes, tropical heats, dangerous departures, and descents more dangerous still, the "Victoria" had successfully encountered them all. The Doctor seemed to guide her as he wished, and had no fears about their arriving in safety at the end of their voyage. In this land of barbarians and fanatics, however, prudence made him take the strictest precautions, and he told his companions to keep constantly on the watch.

Still keeping to the north, they came, about nine o'clock, in sight of Mosfeia, a large town built on an eminence, closed in between two high mountains, and in an impregnable position. It was accessible only by one road, which ran between a marsh on one hand and a wood on the other.

Just then, a sheik, accompanied by a mounted escort, clothed in the most brilliant colours, preceded by trumpeters and runners, who cleared the passage of branches, entered the town. The Doctor descended in order to have a nearer look at the natives; but, as the balloon descended, it gradually looked larger and larger; signs of terror were evident, and they lost no time in running off as fast as their legs or their horses could carry them. The sheik alone did not stir; he took his long musket, cocked it, and waited proudly. The Doctor, when within a hundred and fifty feet of the ground, saluted him in Arabic in the politest manner. But at the sound of these words descending from the sky, the sheik dismounted and prostrated himself in the dust, nor could the Doctor persuade him to rise.

"These people," said he, "undoubtedly take us for supernatural beings, since, on the first arrival of Europeans amongst them, they were believed to be superhuman; and when the sheik speaks of this meeting he will not fail to amplify the fact with all the resources of Arabian imagination. You may fancy, then, what sort of legends will one day be told of us."

"That might be troublesome," said Dick, "from a civilised point of view. It would be better they took us simply for men. That would more strongly impress these niggers with an idea of European power."

"Just so, my dear Dick; but how are you going to do it? You would be a long time explaining the construction of a balloon to them, and after all they would not understand you, and still believe it something supernatural."

"Beg pardon, sir," said Joe, "but you were speaking of the first Europeans who explored this country. May I ask who they were?"

"Yes, my lad! We are now exactly taking Major Denham's route. At Mosfeia itself, he was received by the Sultan of Mandara. He had left Bournou, and accompanied the sheik in an expedition against the Fellatahs, was present at the attack on the town, which, although only defended by arrows, put the sheik's troops to flight: this was a pretext for murder and pillage. Denham was utterly stripped naked, and but that he glided under the belly of a horse, on which he afterwards managed to mount and flee at a gallop for life, he would never have returned to Kouka, the capital of Bournou."

"But who was this Major Denham?"

"A brave Englishman, who, in company with Captain Clapperton and Dr. Oudney, commanded an expedition into Bournou during the years 1822, '23, and '24. They started from Tripoli in the month of March, arrived at Mourzouk, the capital of Fezzan, and following the road which Barth afterwards took to return to Europe, in the following February they reached Kouka, near Lake

Tchad. Denham made many explorations into Bournou, Mandara, and the eastern shores of the Lake. At the same time Clapperton and Oudney penetrated into the Soudan as far as Sackatoo, and Oudney died of fatigue and exhaustion at the town of Murmur."

"This part of Africa," said Kennedy, "has sacrificed many victims to science."

"Yes; this country is fatal! We are now going direct for the kingdom of Barghimi, which Vogel traversed in 1856, in order to penetrate into Wadai, where he disappeared. This young man of three-and-twenty had been sent to co-operate with Barth, and they met in December, 1854, when Vogel began his explorations. About 1856, his last letters announced his intention of visiting the kingdom of Wadai, where no European had ever been. It appeared that he did arrive at Wara, the capital, when, according to some accounts, he was made prisoner, and according to others, put to death for having attempted the ascent of a holy mountain thereabouts. It does not do, however, to admit lightly the accounts of travellers' deaths, for that does away with the necessity of going to look after them; for instance, how many times has not Barth, to his infinite annoyance, been reported dead? It is possible, then, that Vogel has been made prisoner by the Sultan of Wadai, who hopes he may be ransomed. M. de Heuglin, with an expedition from Leipsig, is now on his traces, how-

ever, and we may hope to hear the truth as to the fate of this young explorer."*

Mosfeia had long disappeared beneath the horizon. Mandara displayed to the travellers its astonishing fertility — its forests of acacias, of locust trees, with their scarlet flowers, and fields of cotton and indigo; and amidst this, the Shari rolled its impetuous course on its way to mingle its waters with those of Lake Tchad.

The Doctor made his companions trace the course of this river on Barth's map.

"You see how correct he is? We are now bound direct for the district of Loggoum, and perhaps even for its capital, Kernak, where a young ensign of the 80th regiment died, who had only joined Denham a few weeks when he met his death. Well may this country be called the burial-place of Europeans!"

Some canoes, fifty feet long, were descending the course of the Shari; but the "Victoria," at a height of a thousand feet, attracted little attention from the natives. The wind, which had been blowing pretty strongly, now began to cease, and the Doctor feared they might be again caught in a perfect calm.

A shout from Joe made him look round—

"There!—there is something like a town!"

* Since the Doctor left, letters written by M. Munzinger (then in charge of the expedition) from El-Obeid, leave no doubt of Vogel's death.

"It is Kernak: there is just wind enough to waft us as far, and it will be a good opportunity to make a correct plan of the place."

"Shall we not get a little nearer?"

"Nothing easier, Dick; we are right over the town, and will descend at once."

Half-an-hour later, the "Victoria" was suspended motionless two hundred feet from the ground.

"We are nearer Kernak now," said the Doctor, "than you would be to London if you were roosting on the top of St. Paul's. Here we can look at our ease."

"What is that noise of mallets which we hear on all sides?"

Joe looked attentively, and saw that the noise was caused by weavers, who were beating pieces of stuff, or cloth, hung over large trunks of trees in the open air.

The capital of Loggoum lay beneath, like a plan. It was a veritable town, with houses built in lines, and with tolerable streets. In the middle of a large open square a slave market was being held, and there were plenty of customers, for the women of Mandara are celebrated for their small hands and feet, and are much sought after.

At the sight of the "Victoria," the effect so often seen was again produced. At first loud cries, followed by a profound stupefaction; business was abandoned, work was suspended, noise ceased.

Our travellers remained perfectly still; they did

not lose a detail of that populous city, and even descended within sixty feet of it.

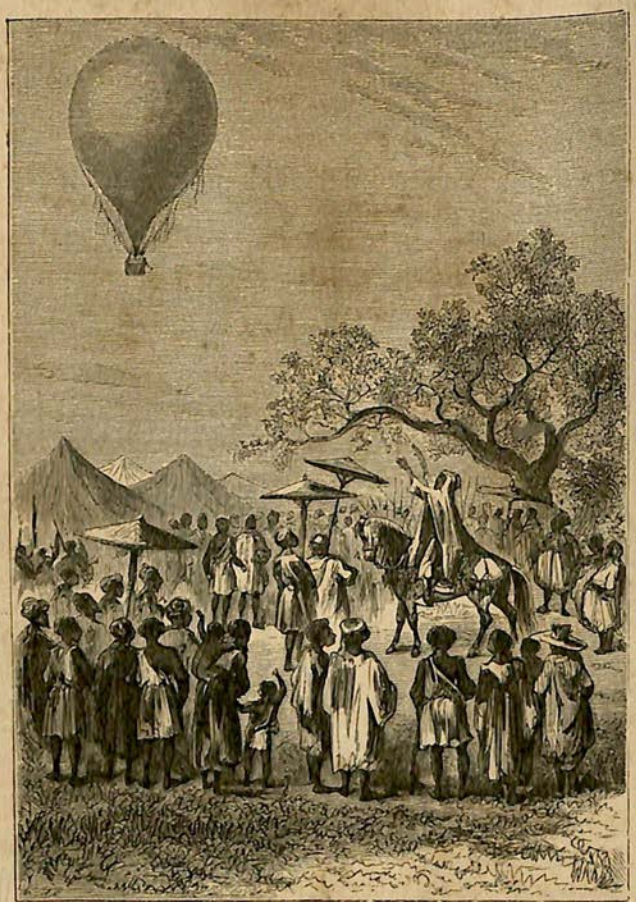
Then the governor of Loggoum came from his house, displaying his green standard, and accompanied by his musicians, who produced the hoarsest and most horrible sounds on buffalo horns. The crowd gathered round him, and the Doctor tried to make himself heard, but could not manage to do so.

This population, with their lofty foreheads, curling hair, and almost aquiline noses, looked proud and intelligent; but the sight of the "Victoria" evidently troubled them. On every side horsemen dashed about, and it was soon clear that the troops were being collected together to fight this extraordinary enemy.

Joe was busily waving handkerchiefs of all colours, but without result.

The sheik, surrounded by his court, proclaimed silence, and made a speech, of which the Doctor could make nothing. It was Arabic, mixed with Baghirmi, but his gestures left no doubt of his meaning; it was an express invitation to be off. He could not have asked better, but as there was no wind the thing was impossible.

The immovability of the balloon exasperated the governor, and his courtiers began yelling to drive the monster away. Strange-looking fellows these courtiers were, wearing five or six shirts speckled with colours, and having enormous bellies: so large, indeed, that some looked false.



The Governor of Loggoum.

The Doctor astonished his companions by informing them that that was the way in which they paid their court to the Sultan. The rotundity of paunch expressed the ambition of the man. These fat men gesticulated and howled: one especially, who, if his fatness ever gets its deserts here below, ought to have been prime-minister.

The crowd of negroes added their yells to the cries of the courtiers, imitating their gestures like so many monkeys, which produced a unique and instantaneous motion of ten thousand arms.

To these means of intimidation, which were judged insufficient, were now added others more formidable. Soldiers, armed with bows and arrows, were ranged in order of battle, but the "Victoria" was already inflated, and rose tranquilly out of shot. The governor, however, seized a musket, and pointed it at the balloon, but Kennedy was too quick for him, and a ball from his rifle broke the weapon in his hand.

At this unexpected shot there was a general rout; every one scampered into his cottage, and during the rest of the day the town remained deserted.

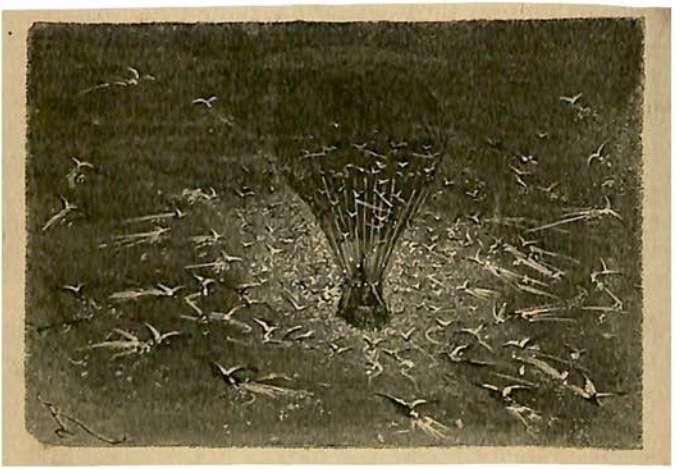
Night came, but no wind; it was resolved to wait at three hundred feet high till morning. Not a light was to be seen in the darkness, and the silence of death reigned around. The Doctor redoubled his precautions—the calm might conceal a snare. And need there was to watch. About

midnight the whole town looked as if on fire; hundreds of streams of light crossed each other like rockets, forming a perfect entanglement of lines of flame.

"Well, that is strange!" said the Doctor.

"Heaven help me!" cried Kennedy; "but the fires seem to rise and approach us!"

And in reality, to the noise of frightful cries and



the reports of muskets, this mass of fire rose towards the "Victoria."

Joe got ready to throw out the ballast, and the Doctor was not long in finding out the meaning of the phenomenon.

Thousands of pigeons, with combustible materials fastened to their tails, had been let off against the "Victoria;" terrified, they flew upwards, tracing

zigzags of fire in the darkness. Kennedy would have discharged every barrel amongst them, but what good would that have been where there was an army of birds of fire, which already surrounded the car and the balloon, the silk of which, reflecting the light, seemed a net of fire? The Doctor did not hesitate; a large block of quartz was thrown over, and they rose at once out of the vicinity of these dangerous birds.

For two hours they could be seen flying about here and there in the night; then, little by little, their numbers diminished, and the lights died out.

"Now we may sleep in peace," said the Doctor.

"Not bad for savages," said Joe.

"Yes, they very commonly use pigeons for setting fire to the thatch of villages, but this time the village flew higher than their winged incendiaries."

"Decidedly, a balloon has no enemies to fear," laughed Kennedy.

"I'm not sure of that."

"Who then?"

"The careless fellows in the car; therefore, above all things, keep a bright look out!"

CHAPTER XXIV.

They leave in the Night.—Kennedy's Instincts.—Precautions.—The Course of the Shari.—Lake Tchad.—The Hippopotamus.—A Shot thrown away.

AT three in the morning, during Joe's watch, the town disappeared beneath his feet; the "Victoria" had caught a breeze, and was on her travels. Kennedy and the Doctor awoke; the latter looked at the compass, and saw with pleasure that the wind bore them north-north-east.

"We are in luck," said he; "all goes well. We shall catch sight of Lake Tchad this very day."

"Is it a large piece of water?" asked Kennedy.

"Considerable, my dear Dick. This lake is about a hundred and twenty miles long."

"That will vary our voyage a little, a trip across a sheet of water."

"Well, I don't think we have anything to complain of. Our voyage has been varied enough, and we are tolerably comfortable."

"True, Samuel; except the privations in the desert, we have run no serious danger."

"Our brave 'Victoria' has behaved splendidly. To-day is the 14th of May; we started on the 18th

of April, that is twenty-five days' travelling; in ten days more we shall have reached the end of our voyage."

"Where?"

"I know nothing about it; but what does it matter to us?"

"You are right, Samuel; let us leave to Providence the care of directing us and keeping us in good health; we don't look now as if we had crossed the most pestilential country in the world."

"At the same time, we shall have learnt something."

"Hurrah for voyages in the air!" cried Joe. "Twenty-five days, and here we are, well fed and well rested; a little too much so, perhaps, for my joints are getting a little rusty, and I shan't be sorry to give them a thirty-mile stretch."

"You will soon be able to do that in London, Joe. But here are three of us, like Denham, Clapperton, and Overweg: like Barth, Richardson, and Vogel; and, more fortunate than our predecessors, here we are all still together. And we must keep so. If one of us were on the earth, and the 'Victoria' had to start to escape some sudden or unforeseen danger who knows if we should ever see him again? So, I tell you frankly, Dick, I don't like your going any distance off on pretext of sport."

"Well, friend Samuel, you are very likely right;

but it is not a bad thing to renew our stock of provisions. Besides, you promised me no end of superb hunting, and I've done nothing yet in the Anderson and Cumming line."

"You've either a bad memory, Dick, or your modesty makes you forgetful, for, besides small game, I think you have already an antelope, an elephant, and two lions, on your conscience."

"What is that to an African hunter who sees all the animals in creation passing at the end of his rifle! Why, look there; look at that herd of giraffes."

"These, giraffes? Why they are no bigger than my finger!"

"Yes, because we are a thousand feet above them. Were you down there you would find they are three times as high as you are."

"And what do you say to that flock of gazelles; or these ostriches, who fly like the wind?"

"Ostriches!" muttered Joe; "no bigger than fowls."

"I say, Samuel, can't we get down near them?"

"Yes, but not to land. What is the use, then, of shooting animals that can be of no use to you? If you were anxious to kill a lion, a tiger, or a hyena I could understand it; it would always be one dangerous beast less; but an antelope or gazelle, only to gratify your instincts as a sportsman, is not worth the trouble. However, as we are now going to descend within a hundred feet of

the ground, if you see any wild beasts put a ball through them, with all my heart."

The "Victoria" descended, but kept at a safe distance from the earth, for in this savage and populous country unexpected perils were always to be dreaded.

Our travellers followed the course of the Shari. The charming banks of the river were lost to sight under the shady foliage of various trees, where lianas and climbing plants twined in all directions, producing a perfect entanglement of colours. Crocodiles lay sunning themselves, or plunged beneath the waters with the activity of lizards, to reappear on some of the many green islands that broke the current of the river.

In the heart of such rich and verdant scenery did they pass over the district of Maffatay, and at nine in the morning they reached the southern shore of Lake Tchad. There it lay, that Caspian of Africa, whose existence had been so long regarded as a fable—that wonderful central sea which had only been seen by two Europeans before—Denham and Barth.

The miry and all but insurpassable marsh which surrounds this lake makes a correct map of it impossible. From one year to the other these marshes, covered with rushes and reeds fifteen feet high, become the lake itself. Often the villages on its shores are half submerged, as happened to Ngornou in 1856, and now hippopotami and

alligators plunge beneath the waters on the same places where the habitations of the Bournou formerly stood.

The sun cast its dazzling rays upon the tranquil waters, and to the north sky and water blended in the horizon.

The Doctor wished to discover the nature of the water, which had long been believed to be salt. There was no danger in nearing the surface of the lake, and the car skimmed over it like a bird at five feet from the surface. Joe lowered in a bottle, and drew it up half full; the water was tasted and found very undrinkable.

While the Doctor was noting the results of his experience, the report of a gun resounded at his ear. Kennedy had been unable to resist the desire to send a ball into a monstrous hippopotamus, who disappeared at the sound of the report, Dick's conical ball not appearing to trouble him.

"It would be better to harpoon him," said Joe.

"But how?"

"With one of our anchors; that sort of hook should suit such a beast."

"Ah!" said Kennedy, "that is a capital idea, Joe——"

"Which I beg you won't put into execution," broke in the Doctor; "the animal would soon drag us where we have no business to be."

"Especially now we know what the water of

Lake Tchad is like. Do they eat these fish, sir?"

"Your fish, Joe, is really a pachydermatous mammifer; they say its flesh is excellent; and a considerable trade is done in it among the tribes along the shores of the lake."

The big words seemed to satisfy Joe, who only

remarked that he wished that since such was the case, that Mr. Dick's shot had been more successful.

"These brutes, Dick, are only vulnerable in the belly and between the thighs; your ball only grazed the one you fired at; but if I see a suitable place to halt on the northern shore we will do so, and you will then be in a regular menagerie, and can enjoy yourself as much as you like."

"I hope you'll shoot a hippopotamus, sir; I should like to taste a bit of him. What's the use of coming to Africa to eat partridges and snipes as we do in England!"

CHAPTER XXV.

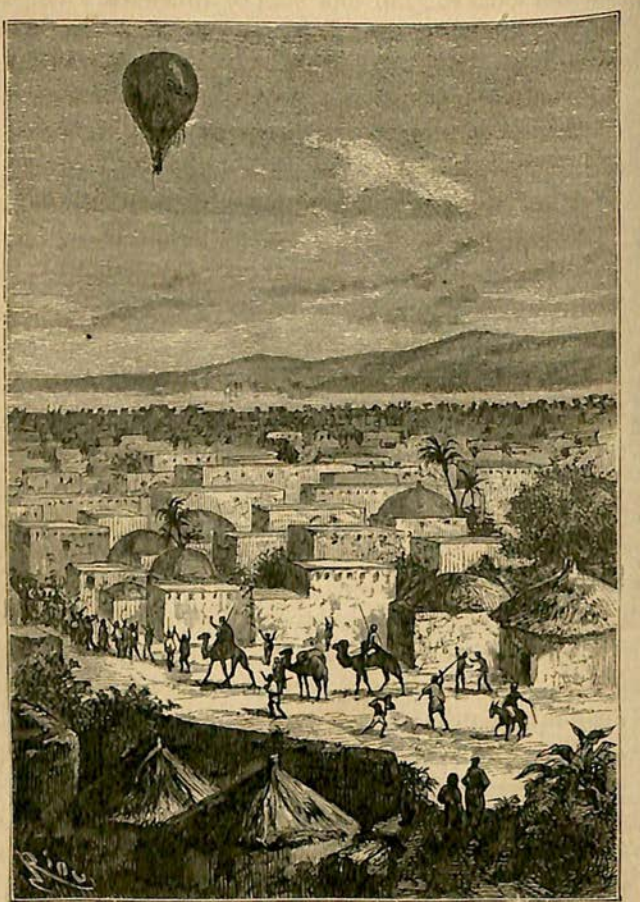
The Capital of Bournou.—The Biddiomah Islands.—The Griffin-Vultures.—The Doctor's Precautions.—Attacked in the Air.—The torn Balloon.—The Fall.—Devotedness.—Northern Side of the Lake.

SINCE their arrival at Lake Tchad, the "Victoria" had met with a current which bore more to the west; some clouds tempered the heat of the day, and the air was always cool above that expanse of water.

About one o'clock, the balloon having crossed that part of the lake obliquely, had again travelled inland seven or eight miles.

The Doctor, who was not very much pleased at this change, had nothing to regret when he perceived the town of Kouka, the capital of Bournou. He could catch a glimpse of it in an instant, surrounded by its white clay walls. Some mosques of considerable size rose heavily above the square, dice-shaped houses of the Arabs. Palm trees and India-rubber trees grew in the courtyards of the houses, and in the public squares, covered with their domes of foliage a hundred feet across.

Kouka is really two distinct towns, separated by a "dendal," a wide street eighteen hundred feet



The Town of Kouka.

long, at that time thronged with people on foot and on horseback. On one side of this—the rich part of the town—are the lofty and airy houses of the wealthy; on the other were sunk the wretched assemblage of low and conical huts in which the destitute population vegetated; for Kouka is neither commercial nor industrial.

Kennedy found something about it not unlike Edinburgh, with its two towns distinctly marked.

Hardly had the travellers time to get a glance at it, however, before the wind, with the changeableness which characterises the currents in that country, blew from another quarter, and took them back forty miles across Lake Tchad. They had then a new spectacle before them; they could count the numerous islands in the lake, inhabited by the Biddiomahs, a set of fierce and blood-thirsty pirates, whose neighbourhood is as much dreaded as that of the Touaregs of the Sahara. These savages made ready to receive the "Victoria" with flights of arrows and stones, but she had soon got clear of these islands, over which she passed like a gigantic moth.

Joe, who was looking out, turned to Kennedy, saying,—

"For you, sir, who are always dreaming of hunting, here comes a chance."

"What is it, Joe?"

"And this time master will not object to your shooting."

"But what is it?"

"Do you see down there, sir, that flock of large birds that are coming this way?"

"Birds?" said the Doctor, seizing his glass.

"I see them," said Kennedy; "there are, at least, a dozen of them."

"Fourteen, sir," replied Joe.

"I trust they are of some breed so mischievous that tender-hearted Samuel won't object to my keeping my hand in."

"I have nothing to say to it, but I should like better to see these birds far from us."

"You are afraid of these birds, sir?"

"They are Gier-Eagles, and of the largest size. Should they attack us——"

"We will defend ourselves, Samuel. We have an arsenal ready for their reception. I don't think these birds are so very formidable."

"Who knows?" said the Doctor.

Ten minutes after the flock were within shot. These fourteen birds made the air resound with their hoarse and savage cries, and they came on to the "Victoria" more irritated than frightened at the sight of it.

"How they scream," said Joe; "what a racket! I suppose they object to our trespassing on their domains, the more that we can fly as well as they can."

"On my word," said Kennedy, "they do look terrible, and would be more so if they each carried a rifle."

"They don't require them," said the Doctor, who was looking very serious.

The Gier-Eagles wheeled round the "Victoria" in immense but ever-nearing circles; now shooting across the sky with wondrous rapidity, then descending with the speed of a rifle-ball, would spread their wings and glance off at an abrupt angle. The Doctor, now really uneasy, resolved to rise still higher, to escape from such unpleasant neighbours; he expanded the hydrogen. and the balloon immediately began to rise. But the Gier-Eagles ascended with it, not at all disposed to leave it.

"They seem determined to have it," said Dick, cocking his rifle.

And, indeed, these fearful birds were getting nearer and nearer, more than one of them within fifty feet of the car, and as if braving Dick's skill.

"I've a deuced good mind to fire."

"No, Dick, no; don't render them furious without reason. That would only incite them to attack us."

"But I'll very quickly make an end of them."

"You're mistaken, Dick."

"We have a bullet for each of them."

"And if they get up above the balloon, how are you to get at them? Fancy yourself facing a troop of lions on land, or of sharks in the ocean—for us the situation is as dangerous."

"Are you speaking seriously?"

"Very seriously, Dick."

"Let us wait, then."

"Yes, wait. Hold yourself ready in case of attack; but do not fire till I give the word."

The birds were now clustered together at a little distance, and it was easy to distinguish their bare and featherless throats distended with the efforts of their screams, and their cartilaginous crests, crowned with violet-coloured excrescences, which they erected with fury. They were of enormous size, measuring fully four feet in length, with a stretch of wing of more than twenty feet. Their white wings glittered again in the sunbeams. One would have thought them winged sharks, to which they bore a terrible resemblance.

"They follow us," said the Doctor; "and although we are extremely high, their flight can take them a great deal higher."

"What is to be done then?"

The Doctor did not reply.

"Look here," said Kennedy, "there are fourteen of them; we have seventeen shots at our disposal. Is there no means of destroying or of dispersing them? I will undertake to give a good account of some of them."

"I don't doubt your skill, Dick. Indeed, I look upon every one you catch a glimpse of through the sights of your rifle as dead. But, I repeat, if they attack the top of the balloon you won't be able to

see them; they will tear the covering which sustains us, and we are three thousand feet from the earth."

At that very moment one of the most ferocious of these birds made a swoop for the upper part of the balloon, its beak and claws open—ready to bite, ready to tear.

"Fire! fire!" cried the Doctor.

As the words left his lips the bird, struck dead, fell whirling through space. Kennedy had seized one of his double-barrels. Joe raised the other to his shoulder. Frightened by the report, the Gier-Eagles had scattered for an instant, but they immediately returned to the charge, screaming with rage. With a single ball Kennedy cut off the head of one; Joe smashed the wing of another.

"Only twelve," said he.

But then the birds changed their tactics, and, with one accord, rose above the "Victoria."

Kennedy looked at the Doctor. In spite of his energy and resolve, the latter had become pale. There was a moment of awful silence. Then came the strident sound of rending silk, and the car sank under the feet of the travellers.

"We are lost!" cried the Doctor, casting his eyes on the barometer, which rose with startling rapidity. Then he added—"Over with the ballast! over with the ballast!" In a couple of seconds every fragment of quartz had disappeared. "Still we keep falling! Over with the water cases! Do you

understand, Joe? We are precipitated into the lake!"

Joe obeyed. The Doctor leant over. The lake seemed to be coming at him like a rising sea; objects enlarged before the glance. The car was not two hundred feet from the surface of Tchad.

"The provisions! the provisions!" cried the Doctor. And the case that held them was thrown into space. The descent became less rapid; but still the unfortunate men were falling.

"Heave away!" cried the Doctor; "heave away!"

"There is nothing more!" said Kennedy.

"Yes!" cried Joe, laconically, and he disappeared over the edge of the car.

"Joe! Joe!" cried the Doctor, terrified. But Joe could no longer hear him.

The "Victoria," lightened of the excess of weight, rose gradually to the height of a thousand feet, and the wind, engulfing itself in the torn covering, bore her to the northern shore of the lake.

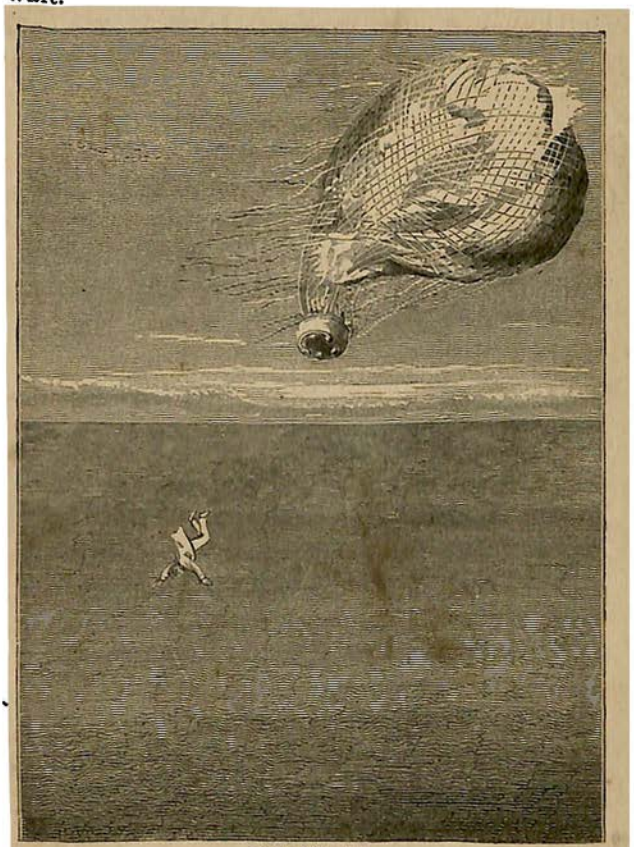
"Lost!" cried Dick, with a gesture of despair.

"Lost to save us!" replied the Doctor. And the eyes of both these brave and intrepid men filled with tears.

They leant over, trying to distinguish some trace of the miserable Joe, but they were already far away.

"What is best to be done?"

"Descend as soon as possible, Dick, and then wait."



Joe's Devotion.

After a voyage of sixty miles the "Victoria" was "landed" upon the desert at the north of the

lake. The anchors caught in a tree of no great height, and Dick carefully made them fast. Night fell, but neither the Doctor nor Kennedy could take a moment of slumber.

CHAPTER XXVI.

Conjectures.—Equilibrium restored.—Fresh Calculations.—Kennedy goes Shooting.—Complete Exploration of Lake Tchad.—Tangalia.—Return.—Lari.

NEXT day, the 13th May, our travellers' first care was to examine the part of the shore they occupied. It was a kind of island of firm land in the middle of an immense marsh. Around this little patch of solid earth rose enormous reeds, as large as European trees, which extended till lost to sight. These impassable swamps made the position of the "Victoria" secure. It was only necessary to keep a watch along the side of the lake. This vast sheet of water was spread out before them towards the east, and nothing could be seen, neither continent nor island. The two friends had not yet dared to speak of their unfortunate companion. Kennedy was the first to impart his conjectures to the Doctor.

"Perhaps Joe is not lost," said he. "He is a clever lad, and there are few swimmers like him. He could swim across the Firth of Forth at Edinburgh. We shall see him again, though when and how I don't know. But, on our side, let us neglect no means to give him an opportunity to rejoin

"May heaven hear you, Dick!" said the Doctor, in a voice broken with emotion. "We shall do all in the world to find our friend again. Let us put ourselves to rights. But first let us relieve the 'Victoria' of the exterior covering, which is now quite useless; that will relieve us of a considerable weight—no less than six hundred and fifty pounds, which will repay the trouble."

The Doctor and Dick went to work, but experienced great difficulties. They had to tear away the strong taffetas in little bits, in order to get it through the meshes of the network. The rent made by the powerful beak of the Gier-Eagle extended several feet. This took them at least four hours of hard work; but fortunately the interior balloon, entirely cleared of the wreck, had received no injury whatever. The "Victoria" was then one-fifth less in size, and the difference was so great as to astonish Kennedy.

"Will it be sufficient?" he asked.

"Fear nothing on that account, Dick. I shall restore the balance of the balloon, and if our poor Joe comes back we shall be well able to proceed on our voyage."

"At the moment of our fall, Samuel, if I recollect rightly, we were not far from an island."

"I recollect it; but that island, like all those in Tchad, is no doubt inhabited by pirates and murderers. These savages must certainly have witnessed our catastrophe, and if Joe has fallen

into their hands, unless superstition protects him, what will become of him?"

"He is the man to get himself out of the business, I repeat; I have every confidence in his address and intelligence."

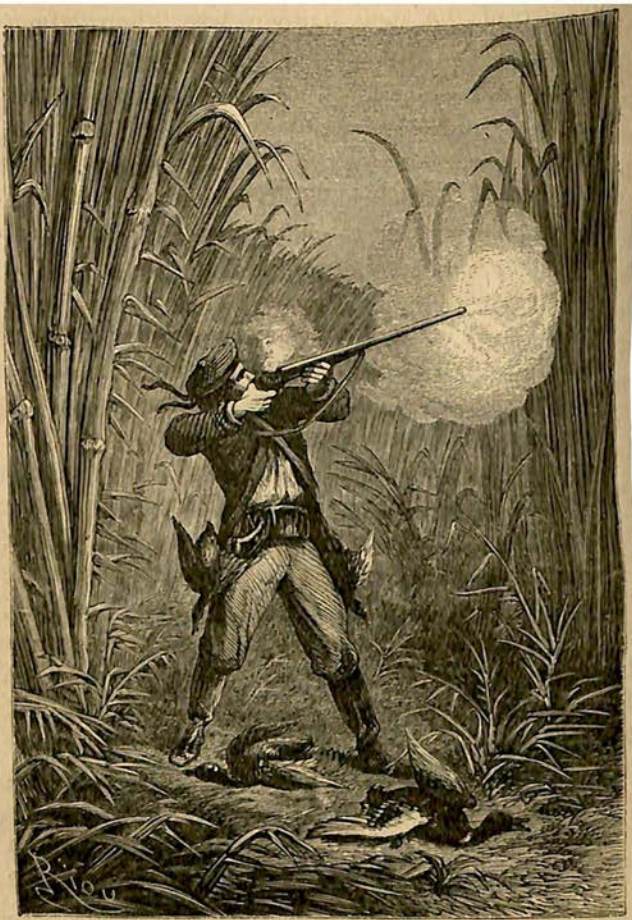
"I hope so. Meanwhile, Dick, do you go shooting in the neighbourhood, but do not go far off. We must renew our stock of provisions, of which the greater part has been sacrificed."

"All right, Samuel, I won't be long away."

Dick took his double-barrel and walked off through the tall reeds to a patch of brush-wood not far off, and frequent reports soon apprised the Doctor that his shooting would be fruitful.

During this time the Doctor busied himself in re-arranging what had been kept in the car, and in establishing the equilibrium of the second balloon. There remained thirty pounds of pemmican, some tea and coffee, about a gallon and a half of brandy, and an empty water case, but all the preserved meat had disappeared. He knew that by the loss of the hydrogen of the first balloon the buoyancy had been lessened very considerably; it was on account of that difference that he had to calculate again his operations for restoring the balance.

The new "Victoria" had a capacity of sixty-seven thousand cubic feet, and contained thirty-three thousand four hundred and eighty cubic feet of gas. The apparatus for expanding the gas appeared to be in good condition; neither the Bunsen battery,



Good Sport.

nor the serpentine worm had been damaged. The buoyancy of the new balloon was, then, about three thousand pounds, and adding together the weight of the apparatus, the travellers, water, and the car, with its accessories, reckoning fifty gallons of water and a hundred pounds of fresh provisions, the Doctor arrived at a total of two thousand eight hundred and thirty pounds. He could thus carry a hundred and seventy pounds of ballast for unforeseen occasions, and the balloon would then be in equilibrium with the surrounding air. His arrangements were made in consequence, and Joe's weight replaced by a quantity of ballast. He employed the whole day in these preparations, and they were complete when Kennedy returned.

Dick had had good sport. He bore a whole load of geese, wild ducks, snipe, teal, and plovers, and turned his attention to preparing his game and smoking it. Each piece, stuck on a slender skewer, was suspended over a fire of green wood, and when he thought all ready—and he thoroughly understood what he was about—all was stowed away in the car. Next day he would complete the stock of provisions.

Night surprised the travellers in the midst of their work. Fatigue gave them an appetite for their supper, and brought them sound sleep; but the watches were still kept, and each in his turn listened attentively, in the hopes of hearing Joe's

voice, but the voice they would so well have liked to hear was far distant.

At the first blush of day the Doctor awoke Kennedy.

"I have been thinking for a long time of how we can manage to find Joe."

"And what is your project? I agree to it beforehand."

"If possible, Joe should have tidings of us."

"Certainly. If the brave lad should imagine that we would abandon him!"

"He! he knows us better; no such idea would ever enter his head; but he must learn where we are."

"How can we do that?"

"We will get into the car and make an ascent."

"But if the wind carries us away?"

"There will be none of it. See, Dick, the breeze will take us back again over the lake, and that circumstance, which would have been annoying yesterday, is the very thing we want to-day. We will limit our efforts to keeping over the bosom of the lake all day long, where Joe will not fail to see us, as he is sure to look there for us. Perhaps we may even find out the place he is in."

"If he is alone and free, he will soon let us know it."

"If he is a prisoner," answered the Doctor, "he will see us, and understand what we are about, for the natives here do not shut up their captives."

"But," returned Kennedy, "I think we should look at every possibility. If we can find no traces whatever of the poor fellow, what shall we do?"

"We will try to regain the northern shore of the lake, keeping ourselves as much in sight as possible; there we will wait, exploring the shores on all sides, for towards these Joe would certainly try to make his way, and we will not leave the place without having done all in our power to find him."

"Come on, then!" cried Dick.

The Doctor found that little piece of solid ground where they had landed lay, according to the map, on the north of Tchad, between the villages of Lari and Ingemini, both of which Denham had visited.

Kennedy had by this time completed his stock of fresh meat, and although he had seen in the marsh many traces of both rhinoceroses and hippopotami, he had not seen any of these enormous animals.

At seven in the morning, Dick managed with much difficulty—which would have been nothing to Joe—to free the anchor, and the new "Victoria" rose two hundred feet. After whirling round for a minute or two, it caught a brisk breeze, and began its voyage across the lake at twenty miles an hour. The Doctor kept at a height varying from two hundred to five hundred feet, and Kennedy frequently discharged his rifle. They approached the various islands almost too closely to be prudent, searching with eager eyes in the brush, the bushes,

and the thickets, wherever there was a shady place or a hole in the rocks that might have formed a hiding-place for their companion.

They several times descended close to the long canoes of the natives, but these fishermen, at sight of them, plunged into the water and made for their island in unmistakeable terror.

"We can't see anything," said Dick, after two hours looking about.

"Wait a bit, Dick, and don't lose heart; we can't be far now from the scene of the accident."

At eleven the "Victoria" had made ninety miles, when a current was met with which drove them almost at a right angle to the course they had been pursuing sixty miles eastward. They crossed a very large and populous island, which the Doctor took to be Farram, where the Biddiomahs have their capital. They expected to see Joe spring from every bush; if free, they could have caught him up without difficulty, or if a prisoner, they could again employ the manœuvre they had used in the case of the missionary; but nothing could be seen, nothing heard of him.

At half-past two they sighted Tangalia, a village situated on the eastern shore of Tchad, and the extreme point reached by Denham. The persistence of the wind in this direction made the Doctor uneasy, as it was fast bearing them to the centre of Africa and its interminable deserts.

"It is imperative that we stop," said the Doctor,

"even if we have to land. For Joe's sake, above all, we must keep over the lake; but, first of all, we must try to find a different current from this."

For more than an hour they sought for a favourable wind in different zones, the "Victoria" all the while bearing off to the land, till, on ascending to a thousand feet, they encountered a gale which drove them to the north-west.

It was not possible that Joe was on any of the islands in the lake, or he would certainly have found means to let them know it; most likely he had been taken ashore. Thus reasoned the Doctor when he regained the northern shore of the lake. As to thinking that Joe was drowned, that was inadmissible. There was, however, one horrible idea which occupied the minds of both our friends: caymans were numerous in these waters! but neither of them had yet given utterance to the thought, when the Doctor, as if answering a question, said:

"Crocodiles are only found on the shores of the lakes or on the islands, and Joe would be clever enough to escape them; besides, they are not very dangerous, and the natives bathe with impunity, without fearing their attacks."

Kennedy said nothing. He preferred holding his tongue to discussing the horrible probability.

At five in the evening the Doctor pointed out the town of Lari. The inhabitants were employed in gathering their cotton, before cabins of plaited

reeds; the fields all properly enclosed and carefully tended. This collection of about fifty cottages lay in a valley, which ran for some distance between low hills.

The violence of the wind drove the Doctor much further than he wished; but changing a second time, it led him back to the very little sort of island where the previous night had been passed. The anchor, instead of catching in the branches of the tree, fixed among the thickly-matted reeds which lay mixed in the mud of the marsh, and which afforded good holding ground. The wind was so strong as to give some trouble with the balloon, but it went down at night, and the two friends slept together, almost hopeless.

CHAPTER XXVII.

Another Hurricane.—Compelled Departure.—Loss of an Anchor.—Sad Reflections.—A fixed Resolve.—The Whirlwind.—A Caravan swallowed up.—Variable Winds.—Return to the South.—Kennedy at his Post.

AT three in the morning the wind began to rise, and blew with such fury that the "Victoria" could no longer remain near the earth without great danger; the reeds crushed in its envelope, which they threatened to tear.

"We must be off, Dick; it won't do to stop here."

"But Joe?"

"I will not abandon him, and if this hurricane should carry me a hundred miles to the north, I shall return; but here we are compromising the safety of all."

"To go without him!" said the Scot, in accents of grief.

"Do you think, then," returned the Doctor, "that I do not feel it as much as you? Can you not see that I must obey an imperious necessity?"

"I am ready," said Dick; "let us start."

But the departure presented great difficulties. The anchor, deeply fixed, resisted all efforts, and

the balloon, drawing strongly against it, made the task still more trying. Kennedy could not manage to tear it free; besides, as the matter stood, his manœuvre would become very perilous, for the "Victoria" might then rise before he could rejoin her. The Doctor, not wishing to run such a risk, made him come up into the car, and prepared himself to cut the anchor rope. The "Victoria" bounded three hundred feet into the air, and carried due north.

Nothing could be done but submit to the power of the tempest. The Doctor crossed his arms, and gave himself up to sad reflections. After some time he turned to Kennedy, who was not less taciturn.

"We have perhaps offended heaven," said he. "Men should not have undertaken such a voyage," and a deep sigh broke from the Doctor's breast.

"Only a few days ago, we were congratulating each other on having escaped so many dangers, and were shaking hands over it."

"Ah! poor Joe!—brave and honest heart!—a moment dazzled by his wealth—how willingly he sacrificed his treasures! And now, who knows how far he is from us, and we travelling away from him at this tempestuous speed?"

"Look here, Samuel; supposing he has found protection among some of the tribes near the lake, why should he not come off as well as Denham or Barth?—they returned to their country."

"But then, Dick, Joe does not know a word of the language—he is alone, and without resources! The travellers you speak of never advanced without sending numerous presents to the chiefs, in the midst of an escort armed and prepared for these expeditions; and, moreover, they were not able to escape sufferings and trials of the worst kind. What, then, may happen to our unfortunate companion, it is horrible to think of, and is one of the bitterest griefs I have ever felt."

"But we shall return."

"We shall return, Dick, if we have to abandon the 'Victoria' and walk on foot to Lake Tchad, and even have an interview with the Sultan of Bournou! The Arabs cannot have any recollections but pleasant ones of the first Europeans!"

"And I will follow you, Samuel!" cried Dick with energy. "You can reckon on me! Sooner let us give up all hopes of ending this voyage. Joe is devoted to us—let us sacrifice ourselves for him!"

This resolution formed, the hearts of these two men felt more cheerful—the idea strengthened them. The Doctor set to work to find another current which would take them back towards Lake Tchad; but just then it was impossible, nor could a descent be effected in that desert country in the midst of a hurricane.

Thus the "Victoria" traversed the country of the Tibbous, and surmounted Belad and Djerid, two

hills which mark the border of the Soudan, and penetrated into the deserts of sand, furrowed by the traces of many a long caravan. The last line of vegetation soon mingled with the sky at the southern horizon, not far from the principal oasis of that part of Africa, whose fifty wells are shaded by magnificent trees, but to stop was impossible. An Arab encampment, with its tents of striped stuffs, and some camels stretched along the sand with their snake-like heads, gave a look of life to the solitude; but the "Victoria" passed like a shooting-star, and ran a distance of sixty miles in three hours, without the Doctor being able to change his course.

"We cannot halt," said he—"we cannot descend—not a tree—not a hillock. Must we cross the Sahara? Heaven help us!"

The Doctor was almost mad with despair when he saw in the north the sands of the desert rising in thick clouds of dust, and whirling round under the impulsion of opposing currents. In the midst of the whirlwind, crushed, broken, and overturned, an entire caravan disappeared beneath the avalanche of sand; the camels, crowded pell-mell together, uttered the most lamentable groans; whilst shrieks and yells came out of the suffocating cloud. For a moment some brightly-coloured burnous would gleam amid the chaos, and then the howling of the tempest reigned supreme over that scene of destruction. The sand quickly accumulated in compact

masses, and where a few minutes before lay a level plain, a hill arose, still heaving with the life beneath it—the desert tomb of the lost caravan!

The Doctor and Kennedy looked on at this awful spectacle; they could no longer manœuvre the balloon, which whirled about in different currents, and refused to ascend or descend with the different temperatures of the gas. Caught in these

eddies of the air, it whirled round with giddying rapidity, the car describing great oscillations; the instruments suspended under the tent clashed together as if they would be smashed; the pipes of the serpentine bent as if about to break; the water cases were loosened from their place, and increased the uproar; at two paces the travellers could not hear each other, and with one hand twisted round

the ropes they held on and tried to keep up against the force of the storm. Kennedy, with his hair flying wildly in the storm, looked on without a word, and the Doctor, whose boldness had returned when in the midst of danger, showed nothing of the emotions which agitated him, not even when the "Victoria," after a last whirl, suddenly stopped quite still in an unexpected calm; the north wind had caught it above, and drove it back again over the route it had just travelled with at least equal speed.

"Where are we?" cried Dick.

"Trust in Providence! my dear Dick. I was wrong to doubt it; it knows what is for the best, and here we are now returning to the very places we never more hoped to see."

The ground which had lain under their feet as they came, had now the appearance of the sea after a tempest; a number of little hillocks dotted the desert on all sides; the wind blew fiercely, and the "Victoria" flew before it. The direction they now pursued differed a little from that they had followed in the morning, so, at nine o'clock, instead of finding themselves at the shores of Lake Tchad, they still saw the desert stretching before them.

Kennedy remarked as much.

"It does not matter," said the Doctor, "the great thing is to get south; we are sure to meet with the towns of Bournou, Wouddie, or Kouka, and I shall not hesitate to stop at any one of them."

"If you are satisfied, I am; but heaven grant that we may not have to cross the desert like those unfortunate Arabs; it was frightful!"

"These storms often occur. Desert voyages are as dangerous as those of the ocean; and, you may suffer as great or greater privations in the desert, and still be liable to be swallowed up in its waves of sand."

"The wind appears to be going down a little, the sand does not blow about so much, and it is clearer towards the horizon."

"All the better; we must examine on all sides carefully with our glasses, and take care that not a spot escapes our view."

"I will take care of that, Samuel, and the first tree shall not appear without my informing you of it."

And Kennedy, glass in hand, posted himself on the front of the car.

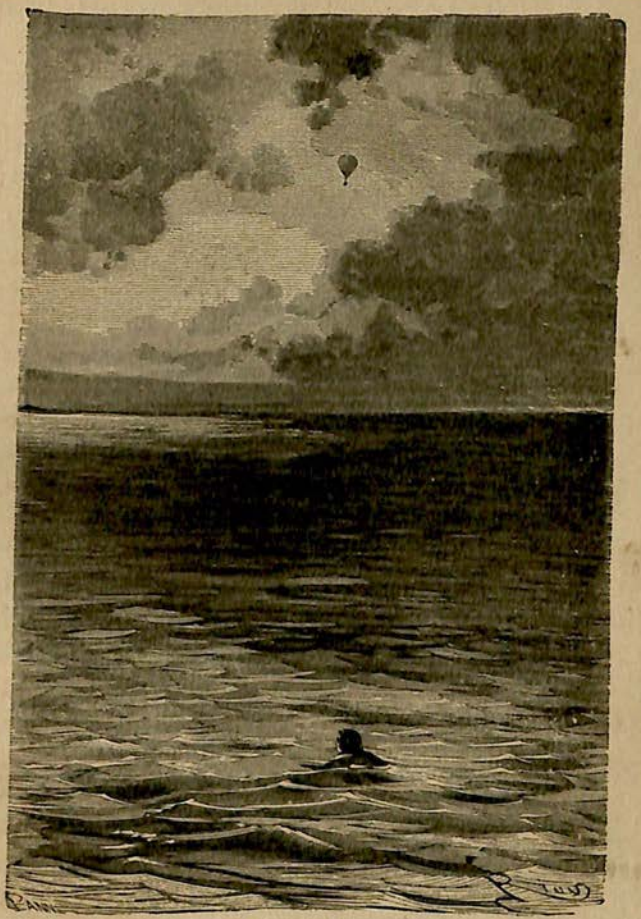
CHAPTER XXVIII.

Joe's Story.—The Biddiomahs.—They worship him.—The Island disappears.—Shores of the Lake.—A Tree full of Serpents.—Journey on Foot.—Sufferings.—Mosquitoes and Ants.—Hunger.—The "Victoria" passes; disappears.—Joe's Despair.—In the Swamp.—A last Cry.

WHAT had become of Joe during the unavailing search of his master? When he threw himself into the lake, his first movement on reaching the surface after his plunge was to look upwards. There he saw the "Victoria," already at a considerable height, rise higher and higher, till caught in a rapid current, it disappeared to the northward. His master—his friends were saved!

"How lucky," said he to himself, "that I had that idea to throw myself into this Tchad! No one can say Mr. Kennedy hasn't got plenty of pluck, and if he had thought of it, he would have done as I did;—for what's more natural to a man than to save other people?"

Having settled this point, Joe began to think about himself. He was in the middle of an immense lake, which was surrounded by people



Joe in Lake Tchad.

entirely unknown, and undoubtedly ferocious; it was clear he must depend on himself to get out of the mess; but that was all that disturbed him.

Before the attack of the Gier-Eagles, he had spied an island on the horizon, and to that he resolved to swim, using all his knowledge of the useful art. He soon got rid of the heavier of his clothes, and felt quite prepared for a swim of five or six miles, especially as he was in the very middle of the lake, and there was no danger there from shallows or rocks. At the end of an hour and a half, he had considerably diminished the distance; but as he approached land, a thought, which at first had merely glanced through his mind, now took firm hold of it. He knew that the shores of the lake were infested by enormous alligators, and he knew the voracity of these animals. He was a good deal shocked. He feared that crocodiles might not have any decided dislike to a white-skin, and he made his way with great care, keeping his eye on the watch. He was not more than a hundred fathoms from a bank sheltered by green trees, when a puff of air, heavy with the smell of musk, caught his nostrils.

"Confound it!" said he, "just what I dreaded—there's an alligator hereabouts."

He dived instantly, but not so quickly as to avoid contact with an enormous body, the scaly epidermis of which tore the skin off his back as he passed it. He believed himself lost, and began to swim with

the quickness of desperation, rose to the surface for breath, and again dived and disappeared. He endured nearly a quarter of an hour of unspeakable anguish, which all his philosophy could not overcome; and fancied he could hear coming up behind him the noise made by these immense jaws which were about to bite him in two. He was swimming along as noiselessly as possible, but in a terribly frightened state of mind, when he felt himself seized by an arm, that clutched him round the body.

Poor Joe! Giving a last thought to his master, he prepared to struggle to the last, when, instead of being dragged to the bottom, as is the habit of alligators and caymans with their prey, he was pulled up to the surface. Scarcely had he breathed and opened his eyes when he found himself between two negroes, as black as ebony, who held him tightly and uttered strange cries.

"Hold hard! There is nothing to hinder you calling out, Joe!—niggers in place of caymans. By Jove! this is a good deal better. I wonder, though, that these gentry dare bathe in such a spot as this!"

Joe did not know that the inhabitants of the islands of Lake Tchad, like many blacks, dive with impunity into waters infested with crocodiles, without taking any notice of their presence; and the amphibious animals of the lake have a well-merited reputation of being very inoffensive.

But had Joe only escaped one danger to plunge

into another? Events will decide. In the meanwhile he allowed them to conduct him to the shore without betraying the slightest fear.

"Clearly," thought he, "these niggers have seen the 'Victoria' skim along the lake, like a monster of the air; they have also witnessed my fall from a distance; and they ought to have a good opinion of a man fallen from heaven! Let me see what they will do!"

Joe had got so far in his reflections, when he was landed in the midst of a howling crowd, of all sexes and ages, but not of all colours: they were a tribe of Biddiomahs, of a splendid black. He had not even to blush at the lightness of his costume, for he was "undressed," in the latest fashion of the country. But before he had time look about him, he could not mistake the worship of which he had become the object; and this by no means reassured him: he had not forgotten the adventures at Kazeh.

"I foresee that I am going to be made a god of again; a son of the Moon, perhaps. Well, one thing's as good as another, when you've no choice. What concerns me is that it will give me time, and if the 'Victoria' should repass, I will give my adorers the 'spectacle' of a miraculous ascension."

Whilst Joe reflected thus, the crowd closed in around him; they prostrated themselves, they howled, they felt him, and became familiar; but, at least, they had thought enough to offer him a magnificent feast, consisting of curdled milk and

rice, mixed with honey. Joe, who could generally take care of himself, made one of the best meals he ever ate in his life, and gave the people a high idea of how gods can eat on grand occasions.

When night came, the sorcerers of the island took him respectfully by the hand, and led him to a cabin surrounded with talismans. Before entering, Joe threw an uneasy glance at the heaps of bones piled up round this sanctuary. He had plenty of time, besides, to reflect on his position when he was shut up in the hut.

During the evening and part of the night he heard their festal songs, the beating of some kind of drum, and a noise of fighting; very pleasant for African ears. The yelling choruses were accompanied by interminable dances, performed around the sacred cabin, with all sorts of antics and contortions.

Joe could watch the whole of this deafening performance through the walls of mud and reeds of which the cabin boasted. He might, perhaps, in other circumstances, have taken a lively interest in their strange ceremonies, but his soul was sad with an idea which tormented him terribly. Looking at the bright side of things, it would be a sad and miserable fate to be lost for ever in that savage country in the midst of such people. Few travellers who have dared to venture into these countries have ever again seen their own. How could he take any pride in the adoration of which he was

the object? He had good reason to believe in the vanity of human affairs. He asked himself if, in that country, adoration was not the first step towards eating the adored!

In spite of this uninviting look out, after some hours of reflection, fatigue overpowered him, and Joe fell into a sleep so deep that it would doubtless have lasted till daybreak, if an unexpected sense of dampness had not roused the sleeper. Very soon this dampness became water, which rose so quickly that Joe was soon waist deep.

"What is this?" said he. "An inundation, a waterspout, or a new torture of these niggers? By Jove! I'm not going to wait here till it is up to my neck!"

So saying, he knocked down the wall with a push of his shoulder, and found himself—Where? In the middle of the lake!

The island was no more; it had been submerged during the night, and in its place was the immensity of Lake Tchad!

"A miserable country for landed proprietors!" said Joe, as he again struck boldly out.

A phenomenon not infrequent on Lake Tchad had effected Joe's deliverance. More than one island has thus disappeared, which seemed as solid as the rock; and often the shore dwellers have to pick up the wretches who have escaped from these terrible catastrophes.

Joe knew nothing of this peculiarity, although

he had unconsciously profited by it. Swimming along, he caught sight of a deserted boat, and was quickly alongside. It proved to be the trunk of a tree clumsily hollowed, and at the bottom lay a pair of paddles, but Joe, finding himself in a current, let himself drift.

"Let's pull ourselves together," said he. "The polar star, which shows everybody the way to the north, would come in very handy if he would only show himself just now."

But he saw with satisfaction that he was drifting northward with the current, and about two in the morning he landed on a promontory covered with thorny bushes and reeds, which tried even Joe's philosophic temper. A tree growing at a little distance seemed to offer him a bed in its branches, into which, for greater safety, he climbed, and without getting very much sleep, waited for day-break.

Morning came with that rapidity peculiar to equatorial regions, and Joe gave a glance on the tree which had sheltered him during the night, only to be struck with terror at the unexpected sight. The branches of the tree were literally covered with serpents and chameleons, the foliage was lost to sight under their twinings and interlacings: one would have thought the tree of a new species that produced serpents. With the first rays of the sun, all of these horrible animals began to twist and crawl. Almost overcome with terror,

The Serpents' Tree.

mingled with disgust, Joe jumped to the ground amid the hissing of the reptiles.

"Well, I couldn't have believed that," said Joe, "and I don't think anybody would."

He did not know that Vogel's last letters had mentioned that peculiarity of the shores of Lake Tchad, where reptiles are more numerous than in any other country in the world.

After what he had seen, Joe determined to be more circumspect for the future, and taking his bearings by the sun, he started off towards the north-east.

He avoided with great care cabins, cottages, huts, even holes that were likely to shelter anything human. How often did he raise his eyes and look round the sky: he hoped yet to see the "Victoria;" and though he had sought in vain during all his day's travel, his confidence in his master was unshaken.

Hunger was now added to fatigue, for roots and the pith of the arbutus trees, such as the "mélé" of the natives, will not keep up a man's strength; and Joe reckoned that he had made a thirty miles' march.

His body bore in twenty places the marks of the thousand thorns with which the lake reeds, the acacias, and mimosas bristle, and his bleeding feet made walking extremely painful; but he was able to bear up under his sufferings, and when evening arrived, determined to pass the night on the shores

of Lake Tchad. Here he had to submit to the painful stings of myriads of insects, flies, mosquitoes, and ants, half-an-inch long, with which the ground was literally covered. At the end of two hours Joe had not a rag left of the few clothes he wore, the insects had eaten them to the last shred!

This was a terrible night, it brought not an hour's sleep to the wearied traveller; and all the time wild boars, wild cattle, and the ajoub, a most dangerous kind of sea-cow, raged amongst the bushes and in the waters of the lake, and a concert of wild beasts resounded through the stillness of the night. Joe dared not stir; his resignation and patience were scarcely able to hold out against such a terrible situation.

Day broke, at last, and Joe started precipitately to his feet. Imagine his disgust to see the filthy animal which had slept close to him—a toad!—but a toad over five inches long; a monstrous, repulsive beast, which glanced at him out of its great round eyes. Joe felt almost sick, but, repressing his repugnance, he ran quickly and plunged into the waters of the lake; this bath in some degree eased the bites which tortured him; and after having chewed some leaves, he took his way again with an obstinacy, an infatuation for which he could not account; he no longer seemed to know what he was about, but felt gifted with a strength superior to despair.

To allay in some measure the horrible pangs of hunger from which he now suffered, he bound one of the long and pliable lianas several times tightly round his body, which somewhat relieved him. Water there was plenty; and, recalling his awful sufferings in the desert, he felt a relative happiness that he had not to suffer the torments of that imperative want.

"Where could the 'Victoria' be?" he asked himself. "The wind blows from the north; it must then come over the lake again. The Doctor no doubt had made the balloon all right again—but a day would suffice for that. It was not then impossible that this very day——. But let us act as if one should never see him again. After all, if I could reach one of the large towns on the lake I should be no worse off than the travellers my master has spoken about to us. Why shouldn't I get out of this as well as they? There were some of them who got back again. What the deuce! Come on, old boy; never say die!"

Joe kept walking on and speaking to himself in this way, when in the midst of the forest he came right upon an assemblage of savages. He stopped in time without being seen.

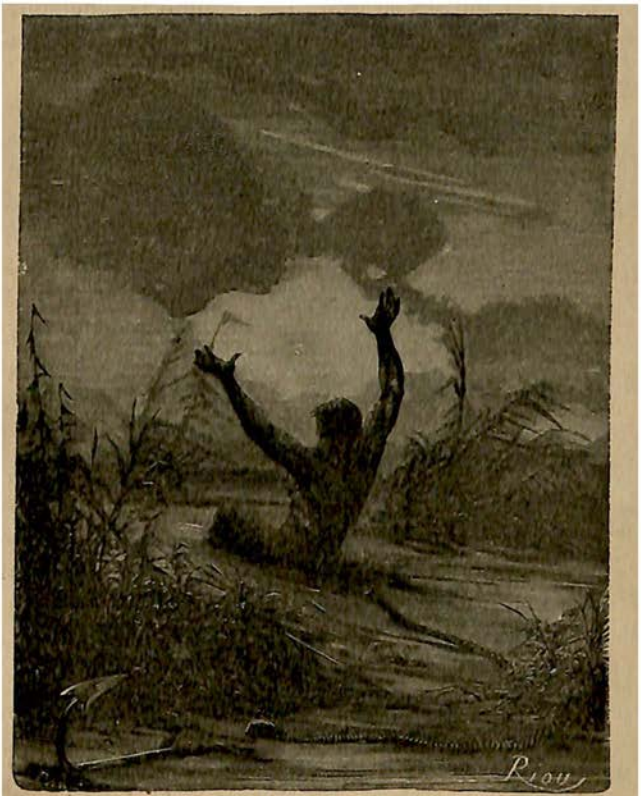
The negroes were busy poisoning their arrows with the sap of the euphorbia, a great occupation among all the tribes of these countries, and which is conducted with a kind of solemn ceremony.

Joe, stealthily holding his breath, had hidden

himself in the heart of a thicket, when raising his eyes through a clear space in the leaves above, he perceived the "Victoria," the "Victoria" herself, bearing towards the lake, scarcely a hundred feet above him. Impossible to make himself heard! Impossible to show himself! His eyes filled with tears, not of despair, but of thankfulness. His master was looking for him; his master had not abandoned him! As soon as the negroes departed he could leave his retreat and run towards the shores of Lake Tchad. But by that time the "Victoria" was lost to his sight in the distance. Joe resolved to wait for her. She would pass again certainly—she would pass again, but more to the east. Joe ran, gesticulated, cried, but it was in vain. A strong wind bore away the "Victoria" with irresistible swiftness.

For the first time energy and hope failed in the heart of poor Joe. He saw himself lost; he believed his master gone never to return; he dared not think; he did not wish to reflect. Like a madman, with bleeding feet and bruised body, he walked all that long day and part of the night; he dragged himself along, now on his knees, now on his hands; and he felt the moment approaching when his strength would at last fail him and he would die. Advancing thus he came to a marsh, or rather what he very soon knew to be one, for, it having been dark for some hours, he fell unexpectedly into a mud hole. Spite of his efforts and

the desperate resistance he offered, he felt himself sinking deeper and deeper into this tenacious



Help! Help!

mire. In a few moments he was as deep as his thighs.

"Death at last," said he, "and what a death!"

He struggled furiously, but each effort only helped to bury him still deeper in the grave he was digging for himself. Not a branch was he able to reach; not a reed even to catch hold of. He understood it was all over. He closed his eyes.

"Help! master, help!" he cried.

But that despairing, solitary voice, already suffocating, was lost in the darkness of the night.

CHAPTER XXIX.

A Crowd in the Distance.—Troop of Arabs.—The Pursuit.—'Tis He! —His Horse falls.—Strangling an Arab.—A Ball from Kennedy. —Manœuvring.—Caught at Flying.—Joe Saved.

SINCE Kennedy had taken his post of observation in the front of the car, he had not ceased attentively to examine the horizon. At the end of some time he turned to the Doctor, and said:

"If I am not mistaken, there is a troop in motion down there; whether men or animals it is too far off to see; at any rate they are in rapid motion, as they raise a cloud of dust."

"May it not be another contrary wind," said the Doctor, "which will drive us again to the north?" And he rose to examine the horizon.

"I don't think so; it looks more like gazelles or wild cattle!"

"Perhaps, Dick; but as they are nine or ten miles from us, I can't make them out even with the glass."

"Anyhow, I won't lose sight of them. There is something there that puzzles me. That was uncommonly like a cavalry manœuvre. I am right! they are horsemen. Look!"

The Doctor looked attentively.

"I believe you are right," said he; "it is some body of Arabs or Tibbous; they are going in the same direction as ourselves, but we are moving much faster, and will soon overtake them. In half an hour we shall be quite near enough to see what they are like and what is to be done."

Kennedy again took up his glass. Several horsemen were visible, and some detached themselves from the main body.

"It is a manœuvre or a hunt. They look to me as if they were chasing something. I should like to know what it is!"

"Patience, Dick! in a very short time we shall overtake them, and even pass them if they continue on this route, we are going twenty miles an hour, and there are no horses that can keep up that speed."

Kennedy kept his glass to his eye.

"They are Arabs, going at full speed. I can make them out perfectly. There are almost fifty of them. I can see their burnous blowing out against the wind. It is a cavalry exercise; the chief rides twenty paces a-head, and they gallop after."

"Whoever they are, Dick, there is nothing to fear from them; and if there is, I shall ascend."

"Wait—wait a while, Samuel!"

"It is strange," Dick went on, still using his glass, "I can't exactly understand their move-

ments. By the efforts they seem to be making, and the irregularity of their line, they have more the appearance of pursuing, than of only following some one."

"Are you sure of it, Dick?"

"Perfectly. I am not deceived. It is a regular hunt, but a man-hunt. It is not a chief who precedes them, but a fugitive!"

"A fugitive?" asked the Doctor.

"Yes!"

"Don't lose sight of them; and let us wait."

Three or four miles were quickly gained on the horsemen, who, however, tore along at a great pace.

"Samuel! Samuel!" cried Dick, in a trembling voice.

"What's the matter, Dick?"

"Is it hallucination? Is it possible?"

"Wait!"

The hunter rapidly wiped the lenses of his glass, and looked again.

"Well?" asked the Doctor.

"'Tis he! Samuel."

"He!" cried the Doctor.

"He," told all. There was no need to name him.

"'Tis he, on horseback, not a hundred paces from his enemies! He flies!"

"'Tis really Joe!" cried the Doctor, turning pale.

"He cannot see us in his flight!"

"He shall see us," cried the Doctor, lowering the flame of his furnace.

"But how?"

"In five minutes we shall be fifty feet from the ground; in fifteen, right over him."

"We must warn him by a shot."

"No, no; he cannot turn back, he is cut off."

"What's to be done?"

"Wait."

"Wait! And these Arabs?"

"We shall reach them; we shall pass them; we are not two miles off, and provided Joe's horse holds out——"

"Good heaven!"

"What is it?"

Kennedy had uttered a cry of despair on seeing Joe thrown to the ground. His horse, evidently spent and exhausted, had fallen.

"He has seen us," cried the Doctor. "He made a sign to us as he got up."

"But the Arabs are on him! What does he wait for? Ah! the brave lad! Hurrah!" cried Dick, unable to contain himself.

Joe rose instantly from his fall, and at the moment that the best mounted horseman dashed down on him, gave a spring like a panther, and, Joe avoiding his attack, sprang behind him, seized the Arab by the throat with his powerful hands, and with his iron fingers strangled him, and threw

him out of the saddle to the sand, and dashed on his fearful course.

A loud cry from the Arabs rose on the air; but, engrossed in their chase, they had not seen the "Victoria," five hundred paces behind them, and scarcely thirty feet from the ground. They were not thirty lengths from the fugitive's horse. One of them was rapidly gaining on Joe, and was just about to pierce him through with his lance, when Kennedy's quick eye and steady hand stopped him with a bullet and tumbled him out of the saddle.

Joe did not even look round at the report. One part of the troop checked their speed, and threw themselves with their faces in the dust at the appearance of the "Victoria"—the others continued the pursuit.

"What is Joe doing?" cried Kennedy; "he does not stop!"

"He does better than that, Dick. I understand him—he keeps in the direction of the balloon. He reckons on our intelligence. Ah! the brave lad! We will carry him off from under the beards of these Arabs—we are only two hundred paces off!"

"What must I do?"

"Lay your gun down."

"There 'tis," said Dick, dropping it.

"Can you hold 150 lbs. of ballast in your arms?"

"More than that!"

"No, that will do." And the Doctor piled the sacks of sand in Kennedy's arms.

"Keep close to the edge of the car, and be ready to throw over all the ballast at once in an instant; but, on your life, do not do it till I give the order!"

"Be easy!"

"Unless you do we shall lose Joe, and he will be destroyed!"

"Never fear for me!"

The "Victoria" was then over the troop of horsemen, who, with slackened bridles, followed close on Joe's steps. The Doctor, in the front of the cradle, held the silken ladder in hand ready to be launched at the right moment. Joe still maintained a distance of fifty feet from his pursuers.

The "Victoria" passed them.

"Attention!" cried the Doctor to Dick.

"I'm ready!"

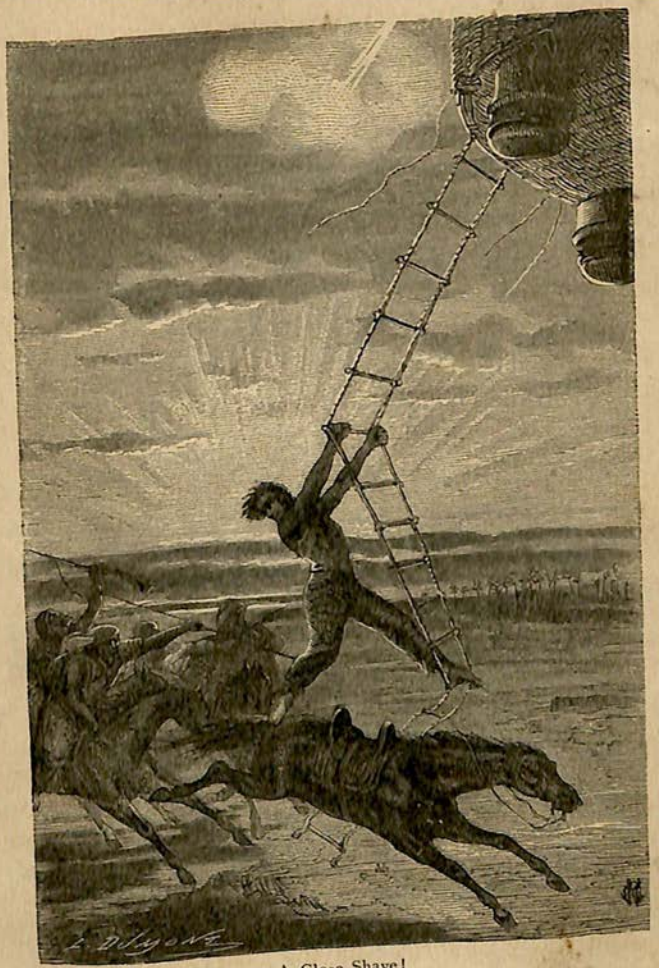
"Joe! look out!" cried the Doctor in a ringing voice, as he threw the ladder, the first rung of which trailed in the dust.

At the Doctor's call, Joe, without stopping his horse, turned—the ladder was close beside him, and in a moment he had firmly clutched it.

"Pitch!" cried the Doctor to Dick.

"Done!"

And the "Victoria," having lost more ballast than Joe's weight, rose to the height of 150 feet. Joe held on tightly to the ladder during the great



A Close Shave!

oscillations which his weight occasioned, then, making an indescribable gesture to the Arabs, he climbed up with the agility of a clown, and reached his companions, who received him in their arms.

The Arabs uttered a cry of surprise and rage at seeing the fugitive thus carried off on the wing, and the "Victoria" rapidly distancing them.

"Master! Mr. Dick!" Joe had said. Succumbing to emotion and fatigue, he had fainted; whilst Kennedy, almost mad with delight, kept repeating —"Saved! saved!"

"Take it coolly, Dick," said the Doctor, who had regained all his quiet impassibility.

Joe was almost naked, his arms bloody, and his body covered with bruises—all told of his sufferings. The Doctor dressed his wounds, and laid him down under the tent.

Joe soon came out of his fainting fit, and asked for a glass of brandy, which the Doctor did not think right to refuse him. It did not do to treat Joe like everybody else.

After having drank, he shook his two companions by the hand, and declared himself ready to tell his story. But this they would not hear of; and the brave lad soon fell into a deep sleep, of which he seemed to have great need.

The "Victoria" then took an oblique line towards the west. Driven by a strong wind, they again saw the borders of the thorny desert: below, the palm trees had been levelled with the ground

or torn to pieces by the tempest; and after traversing nearly two hundred miles since Joe was recovered, they crossed that evening the tenth degree of longitude.

CHAPTER XXX.

Westward ho!—Joe wakes; End of his Story.—Tagelel.—Kennedy Uneasy.—Northward.—A Night near Aghades.

THE wind, during the night, rested after its violence during the day, and the "Victoria" remained peaceably on the top of a great sycamore. The Doctor and Kennedy watched in turn, and Joe profited by it to take a good sleep for twenty-four hours.

"That is the remedy he requires," said the Doctor; "nature herself will cure him."

The wind was tolerably strong next morning, but very capricious, and, after varying about from north to south, at last carried the "Victoria" to the west.

The Doctor, map in hand, recognised the kingdom of Damerghou, an undulating country of great fertility. The huts of its villages built of long reeds mixed with the branches of the asclepia; in the cultivated fields, heaps of grain were raised on little scaffoldings, to preserve them from the attacks of mice and ants.

Very soon after they reached the town of Zinder, easily recognised by its large square devoted to

executions. In the centre rises the tree of death; the tradition is that the executioner watches at the foot of it, and whoever passes within its shadow is immediately hanged.

Looking at the compass, Kennedy could not help saying—

"Here we are going northward still!"

"What matters? If it should take us to Timbuctoo we shan't complain. Never was a pleasanter voyage accomplished, nor under better circumstances."

"Nor in better health," returned Joe, placing his happy-looking face against the net-work of the tent.

"Well, my brave Joe," cried Kennedy, "saviour of our lives, how goes it?"

"Capitally, Mr. Kennedy, capitally! I never was better! Nothing so good for a man as a bath in Lake Tchad and a pleasure-trip afterwards. Is is not, sir?" said Joe, appealing to the Doctor.

"My worthy fellow!" said the Doctor, shaking him by the hand, "what grief and uneasiness you have caused us!"

"Look at yourself, sir! Do you think I took your fate quietly? You may boast of having given me a dreadful fright, sir!"

"We shall never be able to make you out, Joe, if you take things in that fashion."

"I see his fall has had no effect on him."

"Your devotion was sublime, my lad, and it

saved us, for the 'Victoria' would have fallen into the lake, and once there, it could never have been got out again."

"If my devotion, as it pleases you to call my tumble, sir, saved you, it saved me too, and since we are all three here, sound in wind and limb, there is nothing more to be said."

"It is impossible to get to an understanding with this fellow," said Dick, laughing.

"The best understanding, sir, is to say no more about it. What is done is done. Good or bad, it is of no use ever referring to it."

"Obstinate as ever," said the Doctor, smiling. "At least, you will tell us all that happened to you?"

"If you will wait a little, sir. Meanwhile I will see to the cooking of this fat goose, for I see Mr. Dick has not been losing his time."

"As you like, Joe."

"Very well; we will try how African game suits European stomachs."

The goose was speedily grilled, and soon after devoured; Joe eating like a man who had fasted for days.

After tea and a glass of grog, Joe gave his companions a history of his adventures, and despite his naturally philosophic turn, he could not do so without emotion. Several times the Doctor pressed his servant's hand, for he saw that before his own safety he had thought of his master's. The Doctor

also explained to Joe the mystery of the disappearance of the island of the Biddiomahs.

At last, Joe, in pursuing his narrative, came to the moment when, plunged to the middle in the marsh, he uttered a last cry of despair.

"I believed myself lost, sir, and my thoughts turned to you, and I determined to struggle. Why, I cannot say, but I had decided not to be choked without having a say in the matter, when, two paces off, I saw the end of a rope freshly cut. I made a last effort, and somehow got hold of the cable; I pulled, it resisted, till at last I dragged myself on to firm footing. At the end of the rope I found an anchor—ah, sir, I have a good right to call that the anchor of safety, if you will allow me. I recognised it, an anchor of the 'Victoria;' you had landed there! I followed the direction of the rope, which gave me the direction you had taken, and after fresh exertions I got out of the quagmire.

"My strength seemed to have come back with my courage, and I walked part of the night, getting to a greater distance from the lake, till I reached the borders of a large forest, where, in an enclosure, some horses were peacefully grazing.

"There are moments when any man can ride on horseback—it must be so. Without a moment's reflection I jumped upon the back of one of these steeds, and we started off for the north at top speed. I need say nothing of towns I did not see, and of villages which I avoided.

"On I went through fields of flowers. I jumped the hedges, I urged on my horse, exciting him and lifting him along till I reached the limits of cultivation.

"At last! the desert! That was what I wanted; I could see better before me, and I could see farther. I every moment expected to see the 'Victoria' waiting for me along the borders of it. It was not to be seen!

"At the end of three hours I fell, like a fool, into an Arab encampment. Ah, what a chase! A hunter does not know what hunting is, Mr. Dick, till he's been hunted himself, although, if he will take my advice, he will never try it.

"Well, sir, my horse falls down with fatigue; they are close on me. I pick myself up, I leap up behind an Arab! I did not wish to do so, and I hope he will bear me no grudge for having strangled him. But I had seen you, and you know everything that happened afterwards.

"The 'Victoria' followed on my track, and you carried me off flying. Was not I right, then, in depending upon you? I would not mind doing it all over again, if it would be of any use to you; but, as I said, it is not worth talking about."

"My brave Joe, I was quite right in feeling confident in your intelligence and address!"

Whilst Joe had been telling his story, the balloon had cleared a great extent of country, and Kennedy now pointed out a collection of huts in the

distance, which the Doctor, on looking at his map, stated to be the little town of Tagelel, in the Damerghou.

"We come again here," said he, "on Barth's route. It was here he left his two companions, Richardson and Overweg; the first started for Zinder, the second for Maradi, but as you know, Barth alone lived to return to Europe."

"But," said Dick, "looking at the course we are pursuing, it seems we go due north."

"Just so."

"And you don't feel uneasy about it?"

"Why should I?"

"Because this route will take us across the Great Desert to Tripoli."

"Oh, we won't go so far, Dick; at least, I hope not."

"Where do you intend to stop, then?"

"How would you like to go to Timbuctoo?"

"Timbuctoo!"

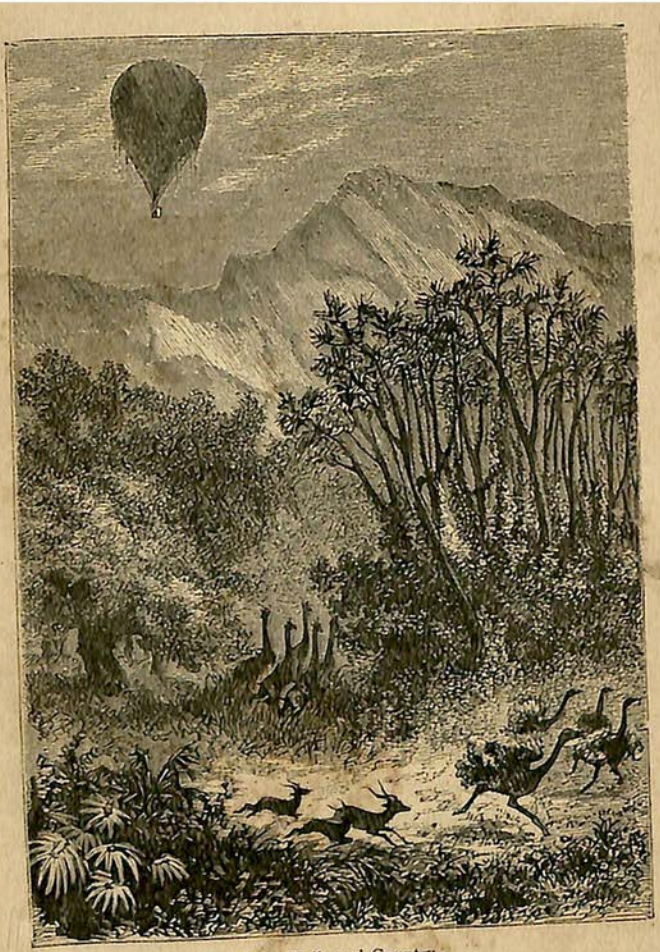
"No doubt," put in Joe, "it would never do to make such a voyage across Africa without visiting Timbuctoo."

"You will be the fifteenth or sixteenth European who has ever seen that mysterious town."

"On we go to Timbuctoo, then!"

"Wait till we get to the seventeenth or eighteenth degree of latitude, and I will try to find a current that will bear us to the west."

"How much farther north have we to go?"



The Kailouas' Country.

"A hundred and fifty miles at least."

"In that case," replied Dick, "I shall go to sleep for a bit."

"You had better lie down also, sir; I have made you watch long enough."

But, though Kennedy lay down, the Doctor remained at his post of observation.

At the end of three hours, the "Victoria" had crossed with great velocity a rugged and stony country, with ranges of lofty and bare granite mountains, some of whose highest peaks reached a height of four thousand feet. Giraffes, antelopes, and ostriches, bounded with marvellous agility through forests of acacias, mimosas, and date trees. The desert was passed, and vegetation had resumed its sway.

This was the land of the Kailouas, who cover their faces with bands of cotton, as do their dangerous neighbours, the Touaregs; and at ten at night our travellers saw by the moonlight a half-ruined town, with here and there the minarets of a mosque rising beneath them, which the Doctor pronounced to be Aghades: which, at one time the centre of a large trade, had now quite decayed.

The "Victoria," unseen in the darkness, after a voyage of two hundred and fifty miles, landed two miles from Aghades, in a field of millet, but the wind soon after changing to the east, was too favourable not to be taken advantage of, and the Doctor again started with the first rays of day.

CHAPTER XXXI.

Rapid Travelling.—Prudent Resolutions.—Caravans.—Gao.—The Niger.—Famous African Travellers.

ALL day long on the 17th of May the "Victoria" bore south-west, without varying in the least. Her shadow traced a straight line on the sand. Before starting the Doctor had prudently renewed his stock of water, as he feared they might not be able to land in the countries infested by the Touaregs. The flat country over which their route lay was about eighteen hundred eet above the level of the sea, and sloped gradually to the south.

During this day Joe cooked the last of the game. The night was lighted by a splendid moon, and the Doctor availed himself of it to travel without halting, and the balloon that night made about sixty miles with so little motion that the sleep of an infant would have been undisturbed. Another change in the wind next morning! This time it bore them to the north-west. Some crows were seen flying about, and on the horizon a flock of vultures, who, luckily, did not approach. The sight of these birds led Joe to speak of the two balloons.

"Where should we have been with but one balloon? This second balloon is like a ship's long-boat; in case of shipwreck we had it to fall back on."

"Very true; but I don't like the long-boat so well as the ship."

"What do you mean?" asked Kennedy.

"That the new Victoria is not worth the old one. Whether the silk has been too much tried, or the gutta-percha melted by the heat of the spiral piping I don't know; but I detect a decided loss of gas. It is not very considerable yet, but is quite appreciable, for we have a tendency to descend, and to keep up to an elevation I have to expand the hydrogen more."

"The deuce! I don't see how you can remedy that."

"There is no remedy, Dick, and that is why I am pressing on, travelling even at night, and halting as little as possible."

"Have we far to go?" asked Joe.

"Where to? How can I tell you where chance may take us? All I can tell you is that Timbuctoo is still four hundred miles off to the west."

"When shall we get there?"

"Let me see; this is Sunday. If the wind holds we should be there on Tuesday night."

"Then," said Joe, pointing down to a long line of men and beasts, "we shall get there before that caravan."

The Doctor and Dick leant over and perceived a vast number of all sorts of beings. There were more than a hundred and fifty camels, which sometimes carry loads of five hundred pounds weight on their backs from Timbuctoo to Tafilet. The fee for this transport is about £5.

These camels of the Touaregs are the best in the world. They can go from three to seven days without drinking, and two days without eating. They are faster than horses, and show an intelligent obedience to the "khabir" or guide of the caravan; the natives call them "Mehari."

Such were the details given by the Doctor whilst looking with his companions at the multitude of men, women, and children walking with difficulty over the half-moving sand, thinly sprinkled with thistles, parched grass, and withered bushes. The wind instantly effaced their steps, and this made Joe ask how the Arabs could find their way in the desert, and find the wells scattered over that vast solitude.

"The Arabs," said the Doctor, "have received from nature a wonderful instinct for knowing their way. Where an European would be utterly at fault they never hesitate. An insignificant stone, a little flint, a tuft of grass, or a different shade in the colour of the sand are sufficient to guide them. Then at night they have the stars. Their average rate of walking is two miles an hour, and as they

rest during the great heat of the day, you may guess how long it takes them to cross nine hundred miles of desert."

The "Victoria" soon left the caravan out of sight, and kept on her way all night. Next day, Monday, it poured with rain incessantly, which added greatly to the weight of the balloon and car, and kept the furnace at work. But this dreary rain explained the existence of the marshes and pools they now saw everywhere, as well as vegetation in the shape of mimosas, baobabs, and tamarinds. This was Sonray, a country covered at this place with villages of houses with sloping roofs, and surrounded by hills full of ravines and little lakes, where the pintado and the snipe found a home. Here and there an impetuous torrent poured across the track, which the natives crossed by going hand over hand on a band made fast to a tree on each side. Soon after came a land of forests, and that was succeeded by dense jungles, where alligators, hippopotami and rhinoceroses, revelled.

"We shall soon see the Niger," said the Doctor. "The country always changes as it nears great rivers. These waterways bring vegetation with them now, as they will one day bring civilisation. The Niger, in its course of two thousand five hundred miles, has on its banks the most important cities in Africa."

At mid-day they passed the little town of Gao,

once a thriving and busy city, and were over the Niger.

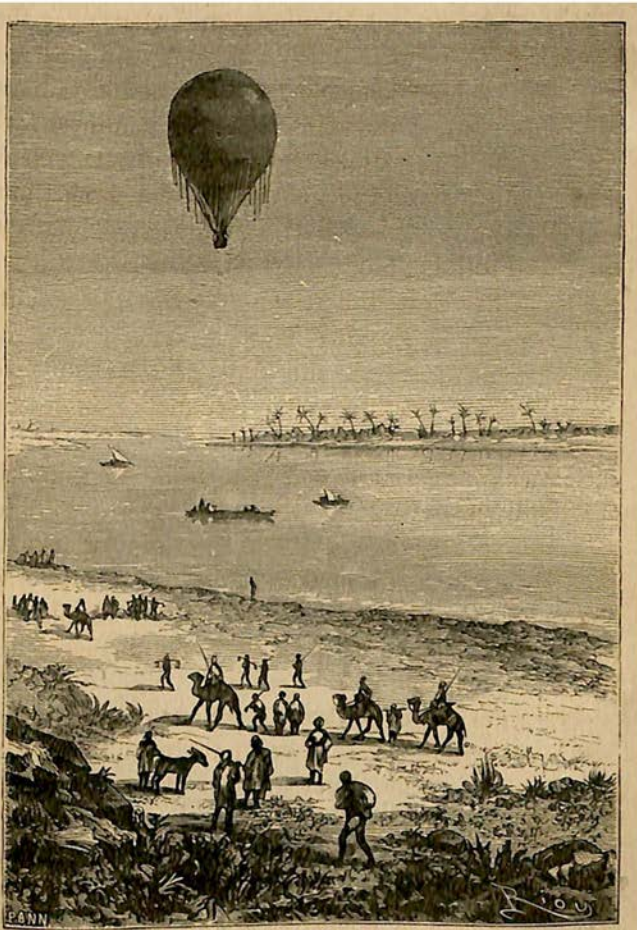
"There, there," said the Doctor, "is that famous river, the rival of the Nile, to which pagan superstition gave a celestial origin; and, like the Nile, it has been a puzzle to geographers since all time, and like it, too, has had a long list of victims sacrificed to its exploration."

The Niger flowed between its two banks with some degree of rapidity, and was even here of considerable width. But the "Victoria" was travelling too quickly for our travellers to do more than catch a glimpse of it.

"I was going to tell you about that river, and it is already far distant. Under the names of Dhiouleba, Mayo, Egghirreou, Quorra, and others, it runs through an immense extent of country, and challenges the Nile in length. These names all mean 'The River' in the different dialects of the people on its banks."

"Has the source of the Niger been discovered?"

"A long time ago. There have been numerous explorations of the Niger and its affluents. I can tell you the principal ones. From 1749 to 1758 Adamson explored the river and visited Goree; 1785 to 1788, Golberry examined the deserts of Senegambia, and pushed through to the country of the Moors, who assassinated Saugnier, Brisson, Adams, Riley, and many others. Then came Mungo Park. This Scotchman was sent out by



The Niger.

the African Society of London in 1795. He reached Bambarra, saw the Niger, travelled five hundred miles with a slave dealer, explored the river Gambia, and returned to England in 1797. He again started in January, 1805, and reached the Niger in August, having lost twenty-nine out of forty Europeans he had brought with him. His last letter was written in November, and it was ascertained from a native merchant that on the 23rd December his boat was overturned and he himself massacred by the natives."

"Did that put a stop to exploring?"

"On the contrary, Dick, for not only now was the river to be explored, but Park's papers were to be found. Two expeditions were sent,—that of Gray in 1816, and of Laing in 1822, and he it was who first reached the source of the Niger, where it was only two feet across."

"Easy to jump!" said Joe.

"Easy!" replied the Doctor;—"if tradition is to be believed, whoever tries to leap across it is instantly swallowed up, and an invisible hand pushes away any one who would draw water."

"I'm not obliged to believe that!"

"Not unless you like! Well, five years later, Laing made his way to Timbuctoo, where he was strangled by order of the sultan, because he would not become Mussulman."

"Another victim!" cried Dick.

"Two travellers besides Laing had got as far

as Timbuctoo; but Caillié was the only one who remained there long enough to be able to give any particulars of this Queen of the Desert: he was there in 1828. After him came Clapperton, who died at Sackatoo in the arms of his servant, Richard Lander, who, in another voyage of exploration, was shot by the natives. You see, then, that this country has had many brave explorers, whose only reward has been death."

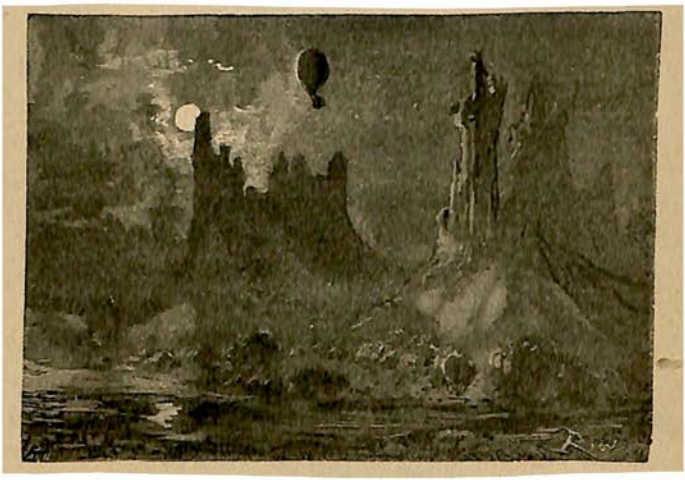
CHAPTER XXXII.

The Country of the Niger.—Singular Hills of Hombori.—Kabra.—Timbuctoo.—Plan of the City.—Whither?

DURING this ill-conditioned day, the Doctor gave his companions many other details of this singular continent, his annoyance, besides the rain, being increased by a strong north-east wind, which was driving them far from the latitude of Timbuctoo.

After flowing as far north as this city the Niger describes a large angle or elbow, and rushes on its course to the Atlantic, which it enters by a wide estuary; the country enclosed in this angle is of the most varied description; now of luxuriant fertility, again sterile and barren. Cultivated fields succeed arid plains; then come vast districts covered with furze, whilst the numerous water-courses and lakes are tenanted by all sorts of aquatic birds—pelicans, teal, and kingfishers. All this part of their voyage, our travellers passed every now and then a camp of Touaregs, who, seated under the shade of their haircloth tents, milked their camels, or smoked their pipes, whilst the women attended to the work inside.

At eight in the evening, two hundred miles to the west had been made, and a magnificent spectacle met their eyes. Some moonbeams struggling through a break in the clouds fell full upon the mountains of Hombori, whose basaltic crests reared their fantastic profiles against the background of lead-coloured sky;—they might have been taken for the legendary ruins of some vast mediæval



city,—such a sight as the icebergs of the frozen ocean present to the gaze of the Arctic mariner. About that time, however, a south-easterly wind took them in the direction which they wanted to go.

On the 20th, they passed over a perfect mesh-work of streams, torrents, and rivulets—all affluents of the Niger; the ground, being covered with a rich

grass, looked like an immense prairie. From this point, Barth started to descend the river to Timbuctoo.

Nearly five thousand feet across, the Niger here flowed between banks covered with passion-flowers and tamarind trees. Herds of gazelles bounded through the tall grass, from out of which the alligators watched them in silence. Long strings of asses and camels, loaded with the merchandise of Jenné, made their way under the lovely trees; and at a bend of the river, an amphitheatre of low houses, their terraces and roofs covered with the forage brought in from the surrounding country, burst suddenly on their sight.

"'Tis Kabra!" cried the Doctor joyfully. "'Tis the port of Timbuctoo; the city itself is only five miles off!"

At the end of two hours, the Queen of the Desert, the mysterious Timbuctoo, which had, like Athens and Rome, its schools of learned men, and its chairs of philosophy, was displayed beneath the eager eyes of the travellers.

The Doctor followed in all its details Barth's plan of the city and recognised its correctness. The city forms a vast triangle, situated in an immense plain of white sand. Nothing else surrounds it save some tufts of grass, dwarf mimosas, and stunted shrubs. From their bird's-eye view, Timbuctoo presented the appearance of great heaps of billiard-balls and dice; the houses, which con-

sist only of a ground floor, and line each side of the straight streets, are built of sunburnt bricks, or of straw and reeds; some conical, some square. The men were lounging on the roofs or terraces, armed with spears or muskets;—not a woman was to be seen.

"But they are said to be beautiful," said the Doctor. "Out of the great number of mosques that once adorned the city, there are only left the three you see. How have the mighty fallen! Palaces, monuments—all are gone! The sheik is now but a tradesman, and the royal palace a shop!"

"I see what look like walls half pulled down," said Kennedy.

"Yes; these were destroyed by the Foullannes in 1826. Before that, Timbuctoo was a third larger; but it has been, since the eleventh century, an object of general desire. It has successively belonged to the Touaregs, the Sonrayens, to Morocco, and to the Foullannes. And this great centre of civilization, where a learned man like Ahmed-Baba had in the sixteenth century a library of sixteen hundred manuscripts, is now nothing but a depôt for the trade of central Africa."

The city seemed given over to utter neglect. Large heaps of rubbish were seen in every quarter, and, with the little hillock on which was the market-place, formed the only inequalities of the surface.

As soon as the "Victoria" was perceived, a movement was observed; the drum was beaten;

but scarcely had the last philosopher left had time to observe this new phenomenon, for our travellers, driven back by the desert wind, again followed the course of the river, and Timbuctoo was only a recollection of their voyage.

"And now Heaven may conduct us where it will."

"Provided always that it is to be west," added Kennedy.

"I don't care whether we go right across to America or back to Zanzibar," said Joe; "one is as easy as the other."

"You must first be able."

"What should prevent us, sir?"

"Gas, my lad. Our buoyancy is very sensibly diminishing, and will want very careful management to get us to the west. I may even be obliged to throw out ballast; we are too heavy."

"We are still a long way from the end of our journey. Where do you think we shall light on the coast?"

"I should be very much bothered to answer you, Dick; but we may think ourselves lucky if we hit the coast between Sierra Leone and Portendick; and in any part of that country we are sure to find friends."

"I shall be only too happy to shake hands with any one I know; but meanwhile are we going in the right direction?"

"Not as much as we might, Dick. Look at the

compass; we are bearing to the south, and following up the Niger to its source."

That night the last of the ballast was thrown out, and though the furnace was kept at its hottest, it was all the Doctor could do to keep at a proper height. They were now sixty miles south of Timbuctoo, and promised to find themselves next day at Lake Debo.

CHAPTER XXXIII.

r harassed.—Still bearing South.—A Cloud of Locusts.—View of Jenné; and of Sago.—The Wind changes.—Joe's Regret.

LARGE islands divided the river into several branches running with great rapidity. On some of these islands were some shepherds' huts, but so greatly had the speed of the "Victoria" increased that there was no time to look long at them. Still bearing to the south, they at last reached Lake Debo.

The Doctor sought in vain for another current of air, although he expanded the gas to its utmost, a manœuvre he was obliged to abandon, as it added to his loss of gas, which escaped all the more through the silk of the balloon. He said nothing, but he became very uneasy. The singular perverseness of the wind in driving them to the south upset his calculations; he knew not upon what to reckon. If he failed to reach an English or French colony what would be their fate amongst the savages who infested the Guinea coast? How was a ship to be found to take them home to England? And the actual direction of the wind was taking them towards the kingdom of Dahomey, amongst the

most savage of all these nations, at the mercy of a king who at public festivals slaughtered his human victims in thousands—it was death! Besides, the balloon was no longer so able to sustain them, and every hour became worse; but the weather clearing a little, he hoped the change might lead to a change of the air currents.

"This is pleasant," said Joe, "and we are going to have it worse, if I may judge by the cloud that is coming."

"Another cloud!" cried the Doctor.

"And a famous big fellow!" said Dick.

"I never saw such an one," added Joe; "its edges are all drawn out in long lines."

"I breathe again," said the Doctor, putting down his glass. "It is not a cloud."

"What then?"

"A swarm of locusts."

"What, locusts?"

"Millions on millions of locusts pass over this country like a whirlwind; and woe to the place they alight—it is certain devastation to it."

"I should like to see that."

"Wait a little, Joe; in ten minutes we shall have reached this cloud, and you can see for yourself."

The Doctor was right; this thick, dark cloud came on with a dull noise, casting its ominous shadow over the earth; it was an innumerable legion of that grasshopper family called locusts. At a hundred paces from the "Victoria," they

The Cloud of Locusts.

alighted on a fresh and verdant country; a quarter of an hour later the mass resumed its flight, and the travellers could then see at a distance the trees and bushes entirely stripped, and the meadows as if they had been mown. It looked as if winter had suddenly changed the whole face of the country.

"Their devastation must be worse than hail," said Dick.

"And there is no way of avoiding them. Sometimes the inhabitants have set whole forests, and even hay-fields, on fire to prevent the flight of these insects; but the first ranks falling into the flames at last extinguish them, and the rest of the swarm pass over. There is one sort of compensation—the natives gather immense numbers and eat them with pleasure."

"They are the shrimps of the air," said Joe. "I should like to taste them."

Towards evening the country became marshy; the forest had given place to solitary little clusters of trees; and by the river-side were tobacco plantations and water meadows. On a large island they saw the town of Jenné, with its two-towered mosques, whence arose an abominable smell from the millions of swallows' nests accumulated around its walls; baobabs, mimosas, and date trees were planted here and there; and even at night the town seemed busy. Jenné is thoroughly commercial; it supplies all the wants of Timbuctoo; its boats by the river, and its caravans by shady

roads, carrying there all the products of its industry.

"If it would not have prolonged our voyage," said the Doctor, "I should have liked to descend here, where we would have been almost certain to find some Arab who had been in France or England, and to whom our means of travelling would not be unknown; but that would not be prudent."

"Let us leave it till our next trip, sir," said Joe, laughing.

"Besides," added the Doctor, "the wind is veering to the east, and it won't do to lose such an opportunity."

The Doctor threw over many things no longer of any use—empty bottles, an old preserved-meat case, &c., and succeeded in keeping the "Victoria" in the current he desired.

At four the early beams of the sun shone on Sego, the capital of Bambarra, easily recognisable by the four towns which compose it, by its Moorish mosques, and by the ferry boats incessantly going to and fro with its inhabitants. They were now flying along too rapidly to see more, and as their direction was north-west the Doctor was not so uneasy.

"Two more days at this pace," said he, "and we shall reach the river Senegal."

"And be in a friendly country?"

"Not quite that perhaps; if the 'Victoria' fail us, we may be able to reach some of the French

establishments on the river, but if she hold out for another hundred miles or so, we shall reach the coast without fear or danger."

"And it will be over," said Joe. "I wonder if any one will believe us?"

"Who can tell, Joe? Thousands saw us start, and let us hope that thousands will see us arrive."

"In which case it would be difficult to say we had not crossed the continent."

"Ah! sir," said Joe, with a great sigh, "if I only had a big lump or two of the golden ore to show, people would then believe every word we say."

CHAPTER XXXIV.

Nearing the Senegal.—Still descending.—Everything Overboard!—The Marabout Al-Hadji.—A Trio of Travellers.—A Rival to Mahomet.—A difficult Passage.—Kennedy's Guns.—Joe's Manœuvre.—Halt near a Forest.

AT nine in the morning of the 27th May the country presented itself under a new aspect, small hills running down the spurs of larger mountains, which were distinctly visible, and which had to be crossed, as they separated the basin of the Niger from that of the Senegal, and determined the course of the streams, to the Gulf of Guinea or to the Bay of Cape Verd.

The part of Africa where they now were is noted for its dangers. The Doctor knew from his precursors the privations they had suffered and the dangers they had run in the midst of barbarous negroes. In this country Mungo Park had lost most of his companions; and the Doctor decided not to land in it at all. But he had not a moment's rest, the "Victoria" sensibly lowered, and they had to throw over a crowd of objects, now useless, in order to get her over the crest of a mountain; and thus it went on for a hundred and twenty

miles, this new rock of Sisyphus always returning. The shape of the balloon had now become long and thin, and the wind made deep holes in the badly distended envelope.

Kennedy could not help the question—

"Is there a hole in it?"

"No; but the gutta-percha has been softened or melted by the heat, and the gas escapes through the silk."

"How can we prevent it?"

"We must lighten it. Throw over everything we can throw."

"But what?" said Dick, looking round the fast emptying car.

"We must get rid of the tent first; that is tolerably heavy."

Joe sprang up to the circle where the network met, and holding on by the ropes, loosened the tent curtains and threw them over.

"There," said he, "that will make a thousand niggers happy; there is clothing for as many, for they are very sparing of the stuff."

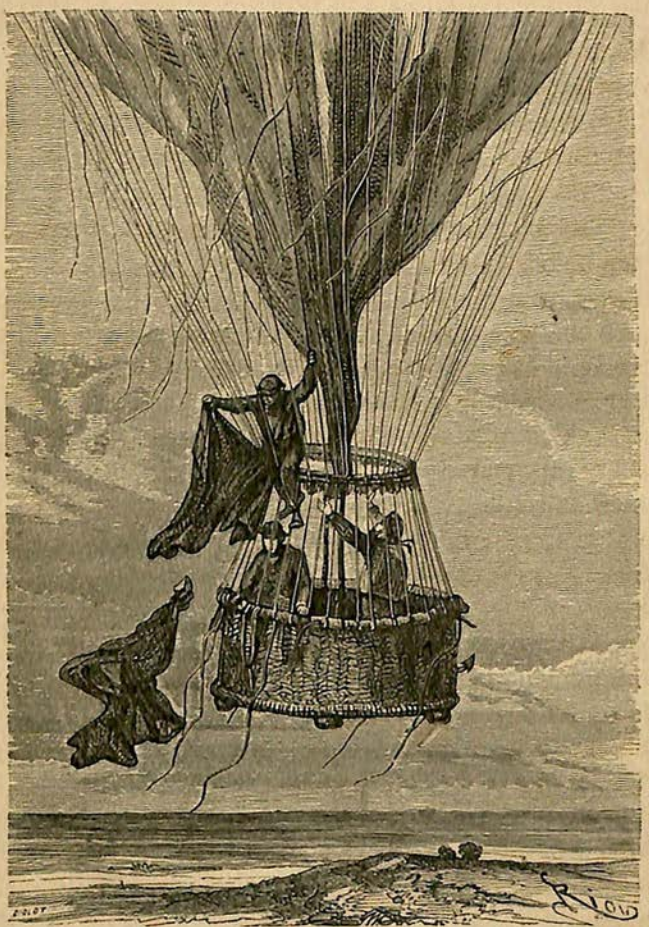
The balloon rose a little, but shortly after again approached the earth.

"Let's get down," said Dick, "and see if we can't do something to the silk."

"I tell you it is useless, Dick; we have nothing to mend it with."

"Then what are we to do?"

"Sacrifice everything that is not absolutely in-



"The Tent must go!"

dispensable. At all costs, I wish to avoid landing in these parts; the forests, whose topmost branches we almost touch, are full of dangers."

"What? Lions? Hyenas?"

"Worse than that! Men! And the most cruel in all Africa."

"How do you know it?"

"By the accounts of former travellers. Since the French have colonised Senegal, they have continual trouble with all these natives, and in their explorations have found everywhere traces of war and pillage."

"How did that happen?"

"I will tell you. In 1854 a Foula marabout, Al-Hadji, stating himself to be missioned by Mahomet, roused all the tribes to war against the infidels; that is, the Europeans. He carried death and destruction over all the country between the Senegal and its affluent the Falémé. These hordes of fanatics, led by him, traversed the country, pillaging and massacring, and sparing neither village nor cabin; they even advanced as far as the town of Sego, which was threatened for some time. The French at last drove him beyond the Senegal into the country of Kaarta, where this villain, with his hordes of ruffians, now are, and I assure you it would be a very horrible fate to fall into their hands."

"We won't do that," cried Joe; "we will rather throw away our shoes to keep up the 'Victoria.'"

"We are not far from the river, but I foresee our balloon will not carry us over it."

"Let us get to the banks, at all events," said Dick; "that will be so much to the good."

"That we must try to manage; but one thing troubles me."

"What's that?"

"We have mountains to cross, and that will be difficult, as I cannot increase our buoyancy even if I raise the heat to its highest."

"Let us wait and see."

"Poor 'Victoria!'" said Joe. "I love her as a sailor does his ship; and it will break my heart to part from her."

"Be easy, Joe. If we leave her it will be because we can't help it. I only ask her to last twenty-four hours!"

"She is getting exhausted and thin; the life is going out of her," said Joe, looking up. "Poor balloon!"

"There are the mountains," cried Dick, pointing to the horizon.

"They are, indeed; and very lofty, too," said the Doctor, looking through his glass. "I don't see how we are to get over them."

"Can't we avoid them?"

"I fear not, Dick. Look at the space they cover,—half the horizon!"

"They seem to surround us, look either right or left!"

"We *must* get over them!"

"Empty our water-case; only leave enough for one day."

"Done, sir!"

"Are we rising?" asked Dick.

"Very little—not fifty feet; and that is not enough."

As they neared the mountains they seemed to tower above them, as if about to fall and crush them, and it was very clear that they must yet rise more than five hundred feet.

The water in the furnace was thrown out, reserving only a few pints—less than sufficient.

"We *must* get over them," repeated the Doctor.

"Let us throw over the cases, now they are empty," said Dick.

"Over with them!"

"It is sad to see everything going bit by bit," growled Joe.

"By-the-bye, Joe, no renewing of your devotion of the other day. Come what may, swear not to leave us!"

"Be easy, sir; we shall not quit each other."

The "Victoria" had risen another twenty feet, but the crest of the mountain still towered above her; a straight slope stopped abruptly at a wall of rock, which rose perpendicularly to the top of the peak, which was yet two hundred feet above them.

"In ten minutes the car will be smashed against those rocks, if we cannot surmount them!"

"Well, sir," said Joe, awaiting orders.

"Throw out everything in the way of provisions but the pemmican."

Fifty pounds weight was thrown over; the balloon rose a little, but not yet to a level with the mountain top. The situation was frightful! The "Victoria" was travelling with great speed; they felt they were about to be smashed to pieces! The effect of the shock would be awful! The Doctor looked round the car. It was almost empty!

"If necessary, Dick, hold yourself ready to sacrifice your arms."

"My guns!" cried the hunter.

"My friend, if I ask it, it is because we must."

"Oh! Samuel, Samuel!"

"Your guns, powder, and shot, may cost us our lives!"

"We are nearer and nearer!" cried Joe. "Thirty feet!"

Thirty feet still higher than the car rose the crest of the mountain!

Joe seized the rugs and threw them over. Dick silently sent his powder and lead after them. The balloon surmounted, and could pass that dangerous peak, but the car was yet below the level of the rocks, against which it must inevitably be dashed!

"Kennedy! Kennedy!" cried the Doctor, "over with your guns, or we are lost!"

"Wait! Mr. Dick; wait!" cried Joe. And Ken-

nedy, turning round, saw him disappear out of the car.

"Joe! Joe!" cried he.

"The unfortunate lad!" said the Doctor.

The crest of the mountain might have been twenty feet wide, and then, on the other side, was a slight declivity. The car just cleared the level, its bottom creaking over the rough stones lying loose on that fearful summit.

"We are clearing it! we are clearing it! we are over!" cried a voice which made the Doctor's heart bound.

The intrepid lad had kept his hands on the lower part of the car, running on foot over the crest of the mountain, and thus lightening the balloon of his weight. He was obliged to hold on with all his strength, and even then it very nearly escaped from him. When he reached the other side, and the abyss stared him in the face, by a vigorous effort and use of his wrist, he swung himself up and caught hold of the rope-work, and so rejoined his companions.

"Nothing difficult about that," said he.

"My brave Joe! my noble friend!" cried the Doctor.

"Oh, it wasn't for you this time, sir," laughed Joe; "it was for Mr. Dick's rifle. I owed him something after that affair with the Arabs, and I did not like to see him lose his gun."

Dick, unable to speak, shook Joe's hand as if he would tear it off.

A Perilous Feat.

The "Victoria" now had only to descend, which was easy for her, and came to her equilibrium at two hundred feet from the ground.

The whole country looked as if an earthquake had passed over it, and huge rocks, here and there, made the passage of the balloon very dangerous.

"Much as I would do to avoid it," said the Doctor, "we must find a place to halt."

"At last you decide on it!" said Dick.

"Because I have decided on a course to pursue; it is only six o'clock, and we shall have time. Throw out the anchors, Joe."

Joe obeyed, and the two anchors hung down from the car.

"We are close upon some large forest," said the Doctor, "and can make fast to some tree. On no account will I consent to spend the night on the ground."

"But can't we descend?"

"For what, Dick? I tell you it is dangerous to separate; besides, I want your assistance for a difficult work."

The anchors soon caught; the wind fell with the daylight, and the "Victoria" hovered motionless over a large forest of sycamores.

CHAPTER XXXV.

A generous Contest.—The last Sacrifice.—The Distilling Apparatus.—Midnight.—The Doctor's Watch.—Kennedy's Watch; he sleeps.—Fire!—Yells.—Out of Shot.

AN observation of the stars satisfied the Doctor as to his exact position. He was hardly twenty-five miles from the Senegal.

"The most we can do is to cross the river, but as there are neither boats not bridge, we must, at all costs, do so in the balloon. To make that practicable, we must still further lighten the burden we carry."

"But I don't see how that can be done," said Dick, who dreaded the loss of his rifle. "At least one of us ought to decide upon sacrificing himself, and remaining behind, and as it is my turn, I claim that honour."

"Indeed!" cried Joe, "am I not used to——"

"I am not going to jump out, Joe, but to gain on foot the coast of Africa. I am a capital walker, and not a bad shot."

"I will never agree to it," cried Joe.

"Your generous contest is useless, my friends. I do not think we shall come to such an extremity;

besides, if we do, we shall still keep together, and cross the rest of the route together."

"First-rate, sir! A little walk would do us no harm."

"But, first of all, we are about to employ the last means of lightening our 'Victoria.'"

"What are they, I should like to know?"

"We must get rid of the furnace cases, the Bunsen's battery, and the spiral piping; there are there nearly nine hundred heavy pounds to drag through the air."

"But how will you then expand your gas?"

"Not at all, it must do as it is."

"Well, but——"

"Listen to me. I have calculated exactly what buoyancy we shall then have. It is sufficient to carry all three of us with the few things left. We shall hardly weigh five hundred pounds, including the two anchors, which I wish to keep."

"My dear Samuel, you are the most competent to judge. Tell us what to do, and we will do it."

"And here am I, sir."

"Then I tell you that we must sacrifice our apparatus."

"So be it!"

"To work!" cried Joe.

It was not easy work. There was all the apparatus to take apart, piece by piece. Overboard went the mixing case, the furnace case, and that in which the decomposition of water took place. It

required their united strength to separate these from the car, to which they had been strongly secured. But Kennedy was strong, Joe clever, and the Doctor ingenious, so in the end all the pieces were thrown over and disappeared, making large gaps in the foliage of the sycamores.

"The niggers will be rather astonished to find such things in the wood," said Joe. "I wonder will they make idols of them?"

The pipes attached to the valve of the balloon had next to be removed. This was difficult work; but Joe, with his feet bare so as not to fray the balloon, climbed by the netting to the summit, and succeeded in detaching the exterior screws, which allowed the pipes to be withdrawn, and the mouth of the balloon was then hermetically closed by a strong ligature. The "Victoria," lessened by this considerable weight, rose in the air, straining strongly at her anchor. At midnight all this work was happily ended. A supper of pemmican and cold grog was soon despatched, and Joe and Kennedy went to sleep.

"Lie down and sleep," said the Doctor. "I shall take the first watch, and at two I will call you, Dick. When Joe's watch is over at six, we will start, and Heaven grant it may be the last day of our travel."

The night was quiet, the moon sending an occasional gleam of light through the clouds. The Doctor kept his eyes on the thick carpet of leaves

beneath, which hid the ground from him, and listened attentively to the least groan of the branches of the forest. So near the end of his wonderful voyage, he felt nervous and fearful; it seemed as if the place at which he was to arrive was farther off than ever. He thought he heard sounds in the forest; fancying he saw sparks of fire, but an examination with his night glass showed nothing, and the darkness was profound. The Doctor thought it an hallucination, and when the time was up called Kennedy, advised him to be extremely vigilant, and, lying down beside Joe, was soon sound asleep.

Kennedy quietly lighted his pipe, rubbing his eyes, which he could with difficulty keep open. He sat down in a corner and began to smoke like a chimney, to drive away sleep. Silence the most absolute reigned around. A light wind gently rocked the car, inviting the hunter to the sleep which was fast overpowering him. He tried to resist it, opened his eyes several times and looked into the darkness, till at last, fairly done up, he slept.

How long had he slept? He could not say, but he was awoke by an unexpected crackling. He rubbed his eyes and rose; an intense heat struck his face. The forest was in flames!

"Fire! fire!" cried he, scarcely knowing what he was about.

"What is it?" asked the Doctor.

"Fire!" replied Joe. "But who could——"

A burst of loud yelling came from under the thick and burning foliage.

"The savages!" cried Joe. "They have set fire to the forest to make sure of burning us."

"The Talibas, the marabouts of Al Hadji, no doubt!" said the Doctor.

A circle of fire surrounded the "Victoria." The crackling of dead wood was mixed with the spluttterings of green branches; the lianas and leaves,

all the living part of the vegetation, twisted about under the power of the destructive element. Nothing was to be seen but an ocean of flame. Enormous trunks of trees stood up blackly from the midst of the furnace, their branches on fire. And all this flame reflected in the clouds seemed to environ the travellers in a sphere of flame.

"Let us fly! To the ground! to the ground!" cried Kennedy. "It is our only chance of safety."

But the Doctor stopped him with a firm grasp, and at the same moment severed the rope of the anchor. The flames, springing towards the balloon, already were licking her sides, when the "Victoria," freed by the blow of the Doctor's axe, rose a thousand feet in the air. Cries and yells resounded through the forest, accompanied by the reports of muskets. The balloon, catching a breeze which had arisen with daylight, bore away to the west. It was four in the morning.

CHAPTER XXXVI.

The Talibas.—Pursued.—A devastated Country.—Still, still descending.—The last Provisions.—The Rifle needed.—The Wind freshens.—The Senegal.—The Cataracts of Gouina.—Hot Air.—Across the River.

"IF we had not lightened her last night we should have been lost, beyond doubt," said the Doctor; "and we are not yet out of danger."

"What do you fear? The 'Victoria' cannot descend without your leave."

"Cannot she? Look, Dick!"

The borders of the forest were just being passed, and they could see about thirty horsemen, clothed in loose trousers and floating burnouses, armed, some with spears, others with long muskets; and they followed on their quick and fiery horses the course of the "Victoria," which travelled at a very moderate speed. At sight of the travellers they uttered savage cries, brandishing their arms. Rage and anger could be read in their sunburnt faces, rendered more ferocious by a thin but bristling beard, and they traversed with ease the plains and gentle slopes which led to the Senegal.

"It is indeed they! the cruel Talibas, the marabouts of Al-Hadji! I would rather be in the forest, at the mercy of wild beasts, than fall into the hands of these demons incarnate."

"I don't like the looks of them, I confess," said Dick.

"Luckily, the beggars can't fly; that's something," replied Joe.

"Look at these villages in ruins, these burnt huts; that is their work. Where fertile fields once smiled, all is devastation!"

"At all events, they can't reach us; and, with the river between us, we are safe."

"Right, Dick; but we must not get any lower," said the Doctor, with his eyes on the barometer.

"In any case, Joe, there is no harm in looking after our arms."

"It won't hurt us, Mr. Dick; and it is lucky we did not throw them away."

"My rifle!" cried the hunter. "I hope never to lose that!"

Kennedy loaded with great care, he had yet a sufficient supply of ammunition.

"How high are we?" said he.

"About seven hundred feet; but we can neither ascend nor descend, we are at the mercy of the balloon."

"What a nuisance! The wind, too, is only middling. If we could only meet a hurricane, like some we have had, these thieves would soon be

out of sight. If we were within shot, I'd empty their saddles for them one after another."

"Oh, yes! But then they would be within shot also, and the balls from their long muskets might tear the balloon. I leave you to guess what would be our fate."

The Talibas continued the chase all the morning. At eleven, our travellers had hardly made fifteen miles to the west.

The Doctor watched the slightest cloud on the horizon: he dreaded a change in the atmosphere. If they were blown back towards the Niger, what would become of them? Since they started, he reckoned that the balloon had lost more than three hundred feet; the Senegal was still a dozen miles off; and, at the rate they were progressing, it would take three hours to reach it. Fresh cries from the natives in pursuit arrested his attention, the Talibas were urging on their horses. The Doctor looked at the barometer: the cause of the cries was explained.

"We are descending?" asked Dick.

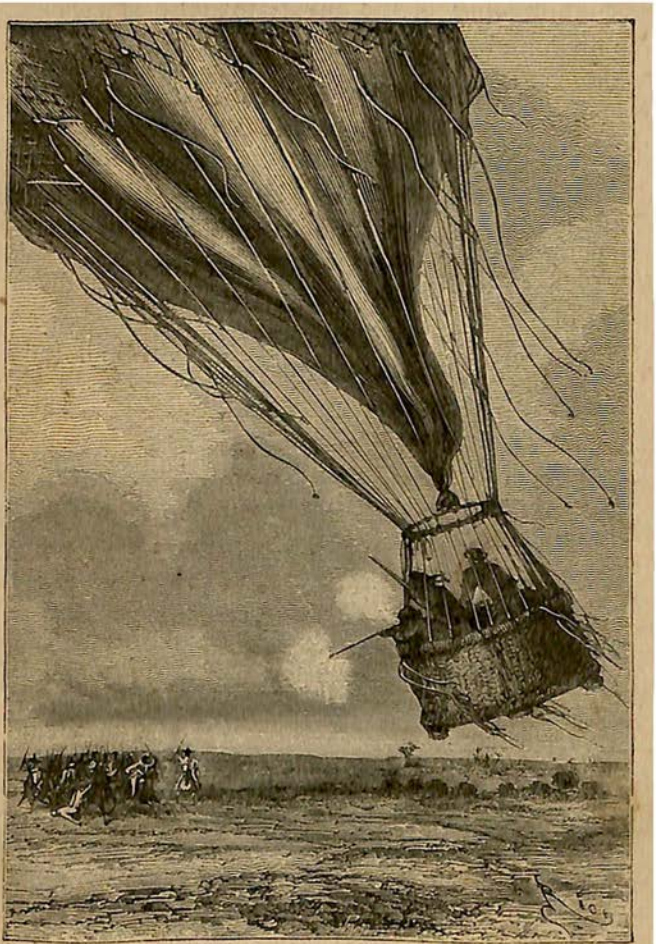
"Yes!"

"The devil!" thought Joe.

At the end of a quarter of an hour the car was only a hundred and fifty feet from the ground, but the wind was stronger.

The Talibas pressed their horses, and very soon a volley of muskets rang through the air.

"Too far off, you fools," cried Joe. "I think we had better keep these gentry at a distance."



Checking the Pursuit.

Sighting one of the most advanced horsemen, he fired, and the Taliba fell to the earth; his companions halted, and the "Victoria" gained on them.

"They are prudent," said Dick.

"Because they make sure of taking us, and they will, if we descend again. We must get rid of something."

"What's to throw?" said Joe, looking round the car.

"The rest of the pemmican—that will lighten us thirty pounds."

"There it goes!" cried Joe.

The car, which almost touched the ground, rose again in the midst of shouts from the Talibas; but half an hour later, it descended with great rapidity, the gas escaping rapidly through the pores of the silk. Very shortly the car touched the ground; the negroes of Al-Hadji rushed towards it; but, as happens in such circumstances, hardly had it touched when it rebounded to descend again a mile farther on.

"We shall not escape them," said Kennedy with anger.

"Throw over our reserve of brandy, Joe, our instruments—everything that weighs anything—our last anchor, if we must."

Joe detached the barometers, the thermometers—all, but without effect; the balloon, which rose for an instant, again touched the earth.

The Talibas galloped on their track, and were not more than two hundred paces distant.

"Throw out the two guns!"

"Not till they are discharged, at least!" cried Dick. And four successive shots emptied as many saddles, amid the yells of the Talibas.

Again the "Victoria" rose, making bounds of enormous length, like a great elastic ball rebounding from the ground. A strange sight, indeed—these unfortunate travellers attempting to escape by gigantic leaps, and seeming, like Antæus, to derive fresh vigour every time they touched the earth. But such a state of things must end.

It was mid-day. The "Victoria," exhausted and empty, could not last much longer, the very folds of the balloon sounded as they rubbed together like the gnashing of teeth in despair.

"It is all over with us," said Dick, "we must fall!"

Joe looked at his master.

"No," said he; "there are still a hundred and fifty pounds to get rid of."

"What?" asked Kennedy, thinking the Doctor had gone mad.

"The car! Up to the network; we can hold on by the meshes till we reach the river! Quick! Quick!"

And these determined men did not hesitate to try that last means of safety. They held on by the network as the Doctor had suggested, and Joe cut

the ropes attaching the car, which fell, just as the balloon was about to strike for the last time.

"Hurrah!" cried Joe, as the balloon rose three hundred feet in the air.

The Talibas lashed their horses, which galloped at their greatest speed; but the "Victoria," meeting with a stronger wind, left them, and blew rapidly away towards a hill, which barred the way for horsemen to the westward. This was a fortunate circumstance for our travellers, as they were now able to surmount this hill, and the Talibas had to ride round it, by the route to the northward.

The three friends held on to the net; they had tied it together under them, and it made a sort of floating bag-net. Suddenly, just as the hill was crossed, the Doctor cried,—

"The river!—the river! The Senegal!"

Two miles off, in fact, the river rolled on its course—a broad and rapid stream; the opposite bank, low and fertile, offered an easy place to descend.

"Another quarter of an hour," cried the Doctor, "and we are saved!"

But it was not so to be; the empty balloon fell nearer and nearer to the ground, where there was but a scanty vegetation, long plains covered with scattered rocks, a few bushes here and there, and a thick grass, quite dried up under the ardent African sun.

The "Victoria" several times touched and rose

again, its bounds diminishing in height and length, till at last its upper part caught in the lofty branches of a baobab—the sole tree visible in this desert country.

"All is over," said Dick, "and at a hundred steps from the river!"

The three unfortunate men landed, and the Doctor dragged his two companions towards the Senegal. At this place, the river made a loud roaring sound, and on reaching its banks the Doctor recognised the falls of Gouina.

"Not a boat to be seen!—not a living being!"

With a width of two thousand feet, the Senegal here fell a hundred and fifty, with a deafening din. It ran from east to west, and the ridge of rocks which barred its course, ran north and south.

In the midst of the falls rose huge rocks of strange forms, like immense antediluvian animals petrified in the midst of the waters. There was no crossing! Kennedy could not restrain a gesture of despair, but the Doctor, with energetic boldness, cried—

"All is not finished!"

"I knew it well!" said Joe, whose confidence in his master was not in the least shaken.

The sight of the dry grass had inspired the Doctor with a bold idea. It was the sole chance of safety. He quickly led back his companions to the balloon.

"We are at least a quarter-of-an-hour ahead of these infernal thieves," said he; "lose no time,

gather as much of that dry grass as you can. I shall want a hundred-weight of it at least."

"What to do with it?"

"I have no more gas; well, then, I shall cross that river with heated air!"

"Ah, Samuel, Samuel, truly you are a great man!"

Joe and Kennedy went to work, and soon a great haycock was raised near to the baobab.

Whilst they were thus engaged, the Doctor had cut away all the lower part of the balloon, including the safety-valve, and so enlarging the orifice. He then took care to expel the last of the hydrogen, and placing a quantity of dried grass under the orifice, set fire to it.

Little time is necessary to fill a balloon with hot air. A heat of a hundred and eighty degrees will suffice to decrease by half the weight of the air enclosed in it. The "Victoria," therefore, began to assume its original shape before the escape of the gas; grass was plentiful, the Doctor kept up a great fire, and the balloon was perceptibly growing larger and larger.

It was then three-quarters of an hour past twelve o'clock.

At this moment, two miles off to the north, the horde of Talibas made their appearance. Our travellers could hear their cries, and the galloping of their horses.

"In twenty minutes they will be here," said Kennedy.

"More grass, Joe! more grass! In ten minutes we shall be off!"

The "Victoria" was two-thirds inflated.

"Now, then, hold on all to the net as we did before," cried the Doctor.

"All right!" responded Kennedy.

At the end of ten minutes the balloon began to make efforts to rise; the Talibas were coming up, and were not five hundred paces off.

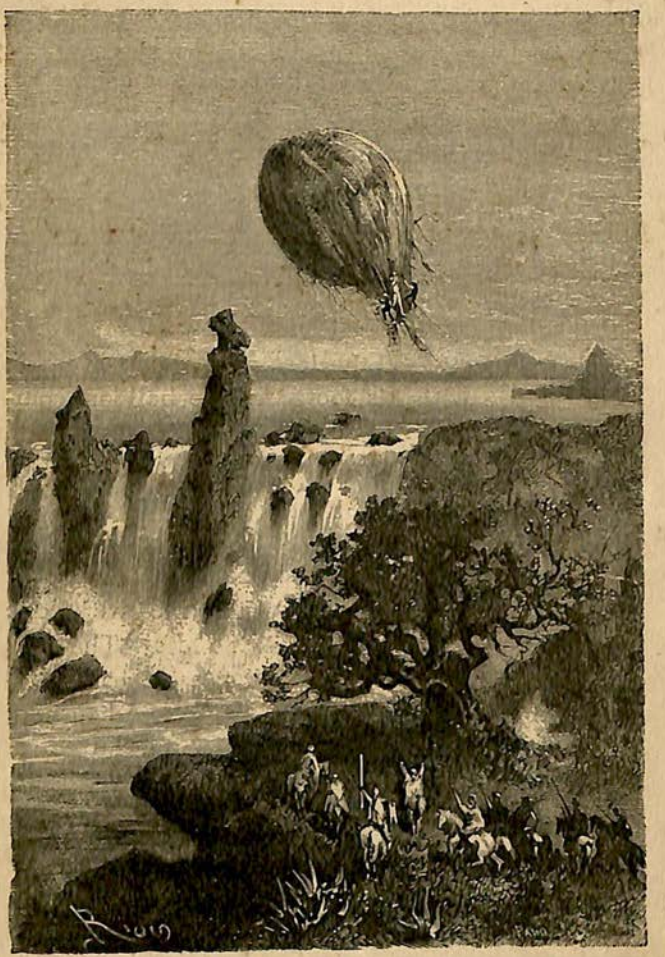
"Hold on!" cried the Doctor, and—

"All right!" answered Dick and Joe.

The Doctor pushed the last great heap of grass on to the fire with his foot, and the balloon, completely distended by this increase of temperature, rose at once, grazing the branches of the baobab.

"We are off!" cried Joe.

A general discharge of muskets replied to him, and one ball grazed his shoulder; but Kennedy, leaning forward, discharged his rifle with one hand, and there was one enemy the less. The yells and cries of rage from the Talibas were indescribable as they saw the "Victoria" rise to a height of eight hundred feet, when she caught a current of air, and swinging her passengers in violent oscillations, began to cross the river right over the cataract. Ten minutes afterwards, not a word having been spoken, the intrepid travellers began gradually to descend to the other side of the river. On that bank stood a group of ten men, startled and wonderstruck at the sight before them; they



The Cataracts of Gouina.

were evidently French soldiers. But the two officers in command, a naval lieutenant and a midshipman, knew of the Doctor's bold attempt from European newspapers, and at once explained matters. The balloon, gradually becoming empty, was rapidly falling with the three aeronauts holding on to the network, but it was very doubtful if it would reach the land. The Frenchmen rushed

into the river and caught the three Englishmen in their arms as the "Victoria" sank into the river several feet from the left bank of the Senegal.

"Doctor Fergusson!" cried the lieutenant.

"Himself," said the doctor gently, "and his two friends."

The Frenchmen bore the travellers to the shore, whilst the balloon, not half inflated, was carried

down by the current like a large ball to be engulphed with the waters of the river in the Cataract of Gouina.

"Poor 'Victoria!'" said Joe, sadly.

The three, deeply affected, watched the last moments of the balloon which had carried them so far and so well.

CHAPTER XXXVII.

Conclusion, and Return to London.

THE French officers were in command of a party which had been sent by the Governor of Senegal to report on the advisability of establishing a fort at Gouina, and who thus had become witnesses of the Doctor's arrival.

"You will bear witness to the fact of our arrival," the Doctor asked the French officer.

"With pleasure. But first come to the temporary shelter we have. You first want rest, food, and clothing; and, luckily, I can supply you with all."

Next day, all three arose refreshed, their troubles no longer thought of, and a regular account of their arrival was drawn up and signed by the officers and men of the French exploring party.

Supported by such irrefutable witnesses, the vaga[illegible]ss Africa ended; for the native whom they now were, were c[illegible]ith their French neighbours, nothing more to fear.

ached the Senegal on the

May, and on the 27th they arrived at Medina, which lies farther to the north.

The French colonists vied with each other in their efforts to do all they could for the brave men who had successfully accomplished such a perilous voyage; and a little steamer, the *Basilisk*, was placed at their orders to carry them down the river to the sea.

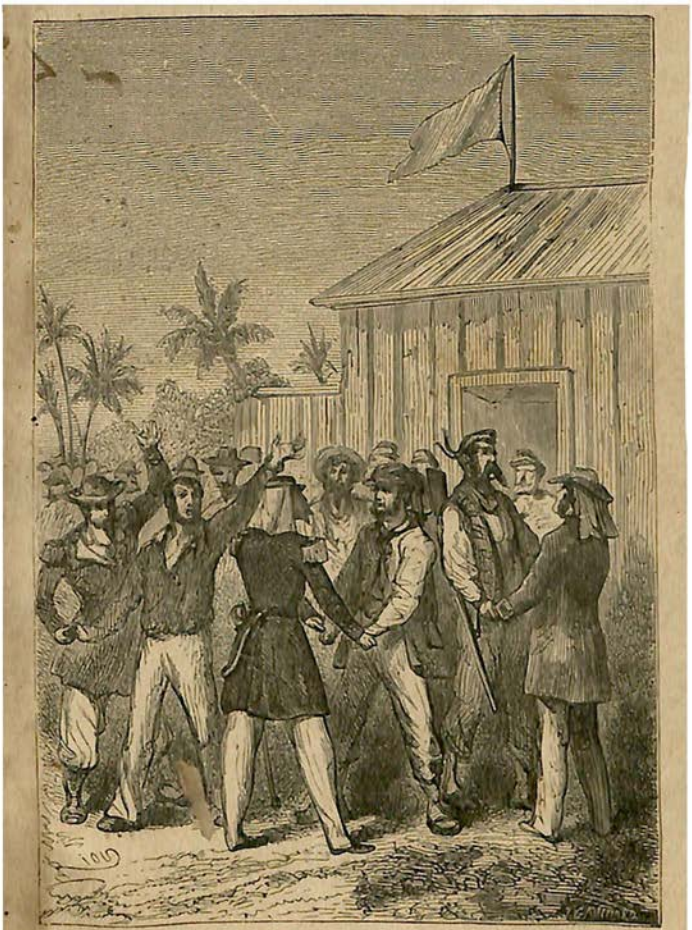
Fourteen days after, on the 10th of June, they arrived at Saint Louis, where they were kindly received by the Governor. They had then entirely recovered from their fatigue.

Joe spoke of their wonderful voyage as a "petty ffair," and recommended all people who wanted citement to avoid a voyage across Africa, as for part he believed, if it had not been for the adventure of Lake Tchad and Senegal, he would have died of weariness and nothing to do.

An English frigate had just been ordered home, and the captain offered the Doctor and his companions a passage. They accepted his offer, and arrived at Portsmouth on the 25th of June. Next day they were at home at the Doctor's, in London.

We all know how grand a reception the Doctor received from the Royal Geo phical when he read the account of d how he was presented by th medal.

n that took place, Kennedy Scotland, with the fame



The Journey Accomplished.

many a deer on his native mountains found to its cost.

As for the Doctor and his faithful Joe, they resumed their usual quiet mode of life, and though they had not ceased to be master and servant, they were, in the highest sense, friends.

THE END.

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